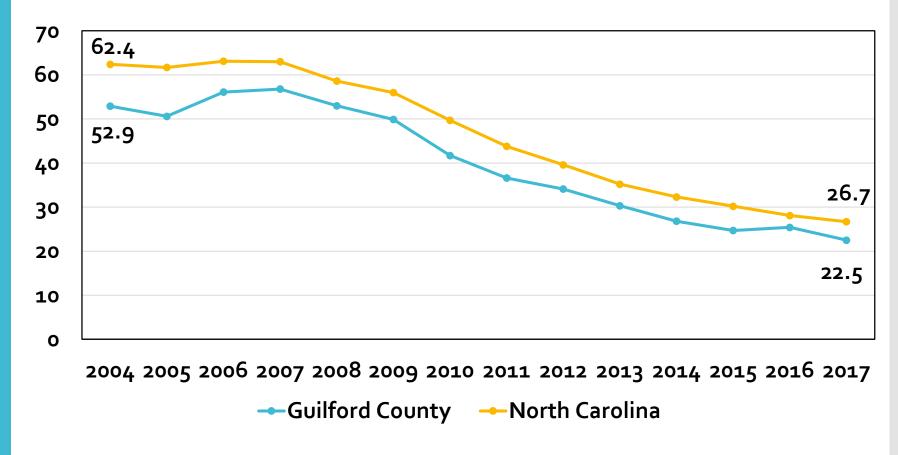
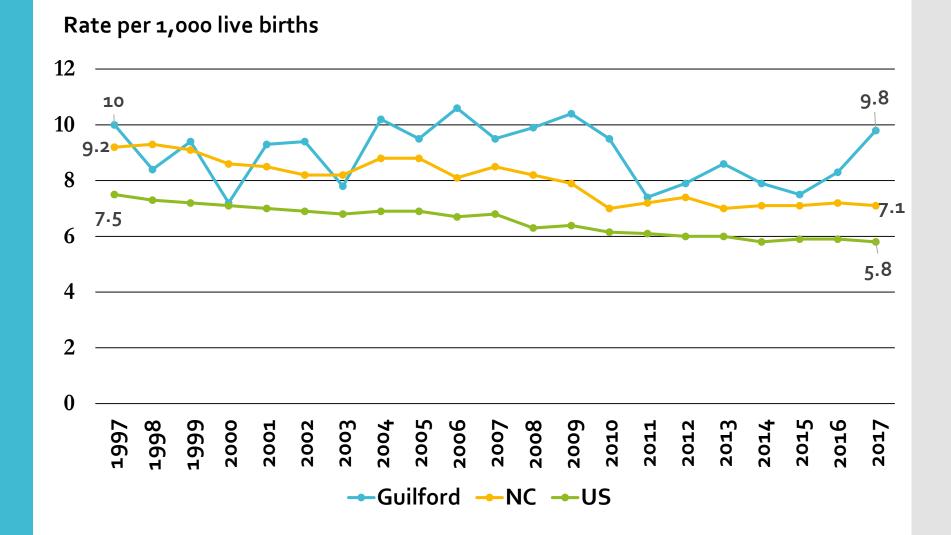
Pregnancy and Birth in Guilford County

2019 Community Health Assessment Appendix C Teen Pregnancy Rates, Ages 15-19 Guilford County and North Carolina 2004-2017

Rate per 1,000 Females Ages 15-19

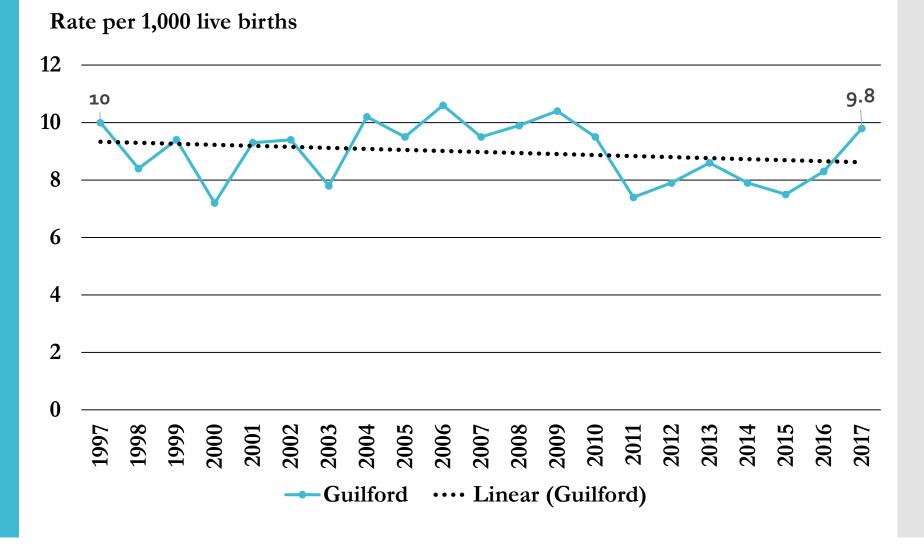


Source: NC State Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health. Infant Mortality
Rate, 1997-2017
Guilford
County, North
Carolina and
United States



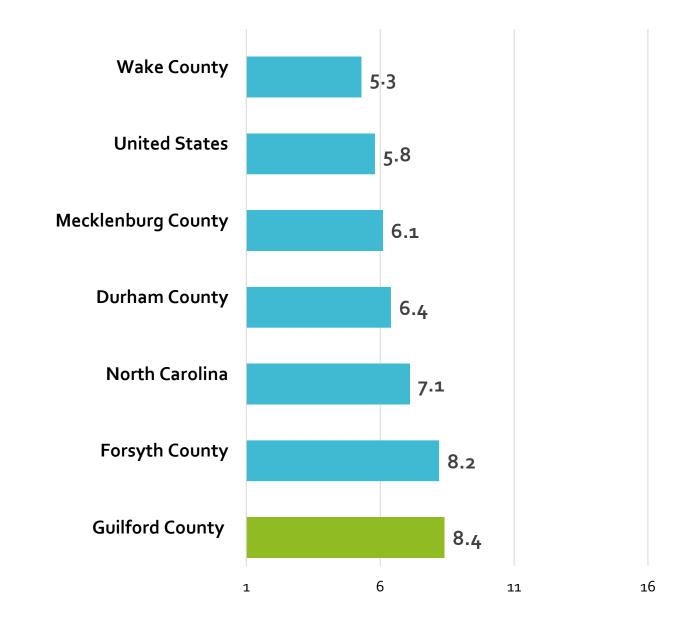
Source: Data provided by the NC Center for Health Statistics, National Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health.

Infant Mortality
Rate, 1997-2017
Guilford
County, North
Carolina and
United States



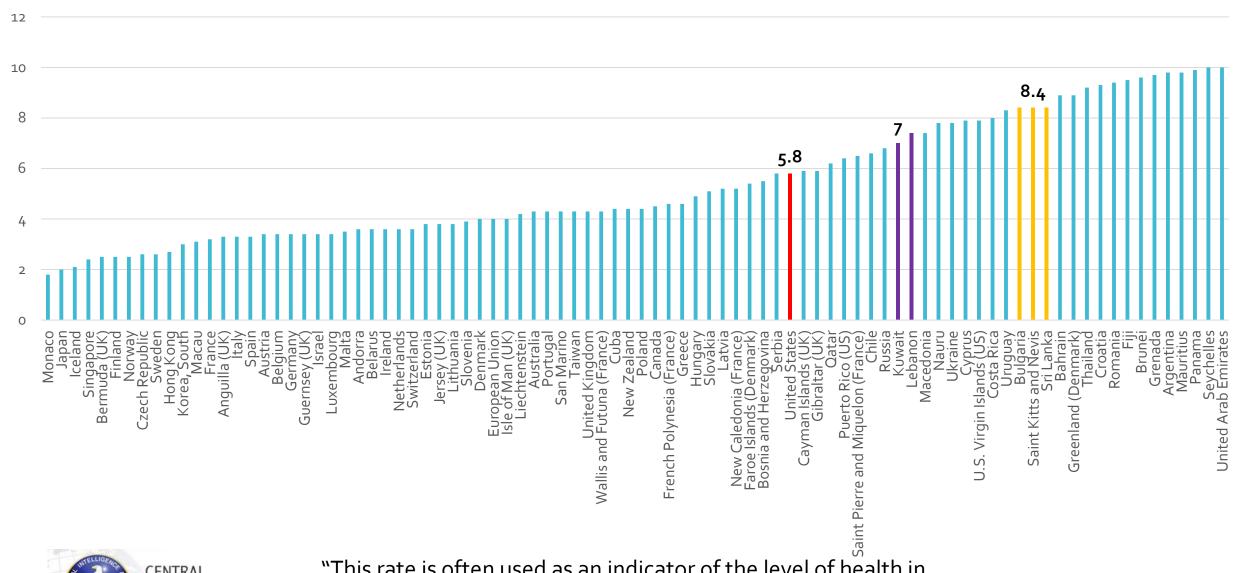
Source: Data provided by the NC Center for Health Statistics, National Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health.

Infant
Mortality
5-year Rates
(per 1000 Live
Births) by
county



Source: SCHS, Databook, 2013-2017; Note, US data for 2017 only. Chart prepared by the GCDHHS, Division of Public Health.

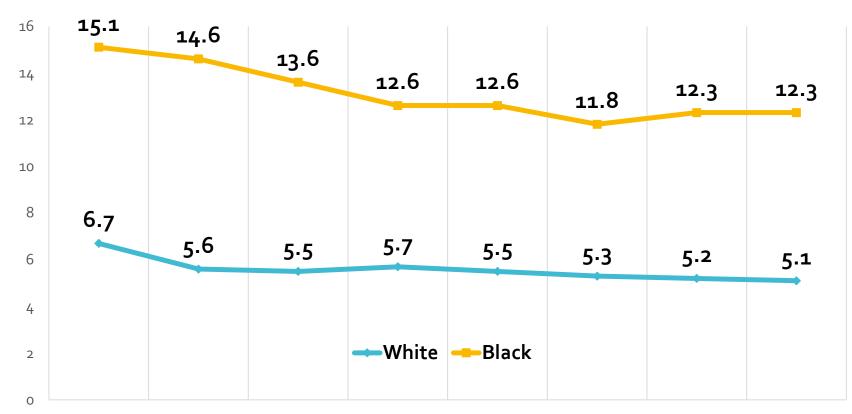
Infant Mortality Rate, Rank by County or Territory, 2017





"This rate is often used as an indicator of the level of health in a country"—CIA World Factbook

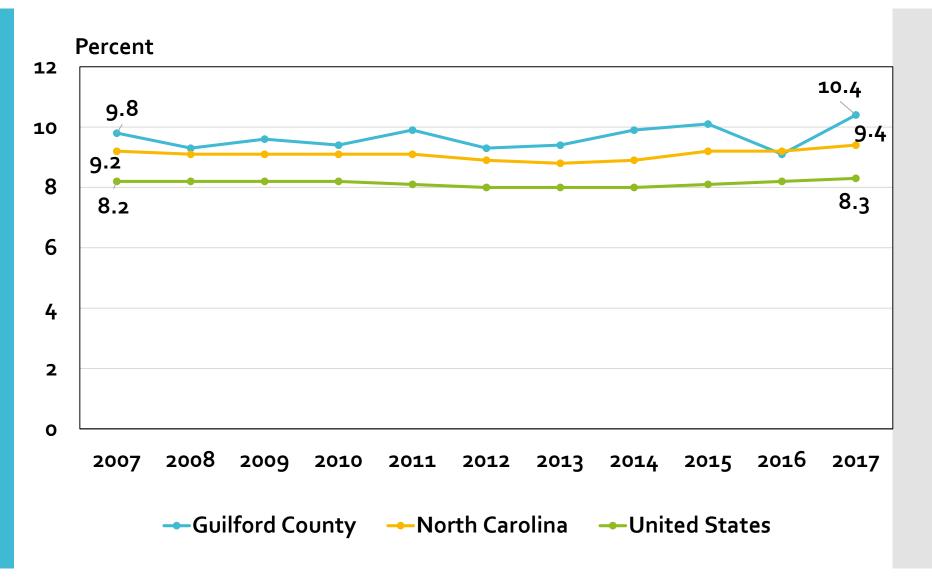
Rolling Five-Year Infant Mortality Rates by Race, Guilford County, 2006-2017



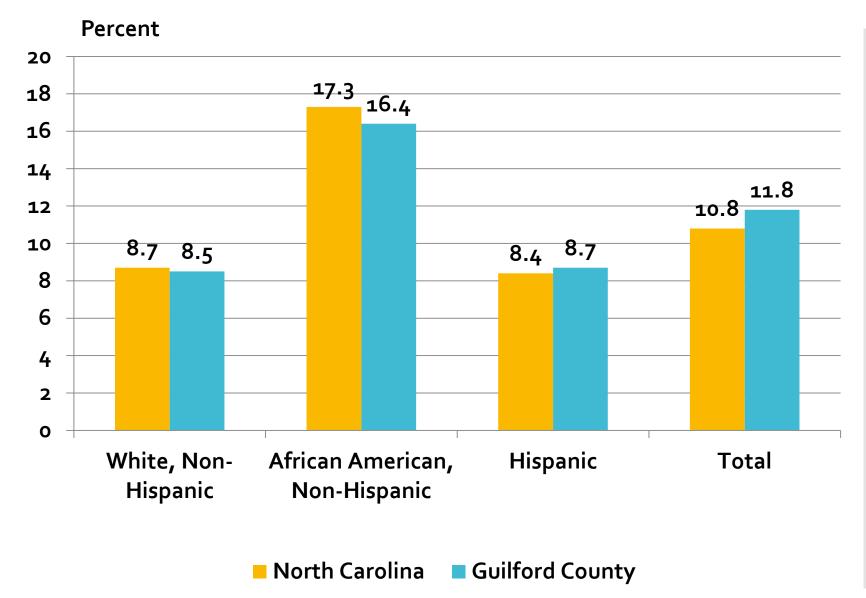
2006-2010 2007-2011 2008-2012 2009-2013 2010-2014 2011-2015 2012-2016 2013-2017

Source: Data provided by the NC Center for Health Statistics, National Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health.

Percent of Births Low Birthweight 2007-2017



Source: Data provided by the NC Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health. Percentage of Births Low Birthweight, 2013-2017



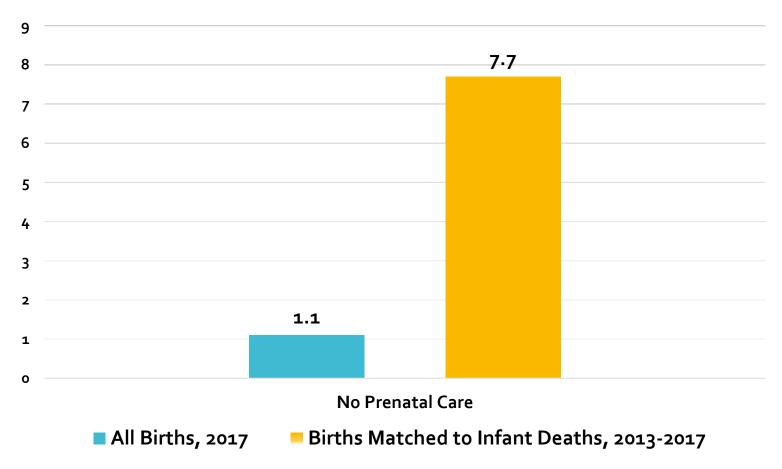
Source: County Health Databook, NC State Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health.

Characteristics of Infant Deaths

Matched Birth, Death Records

Prenatal Care

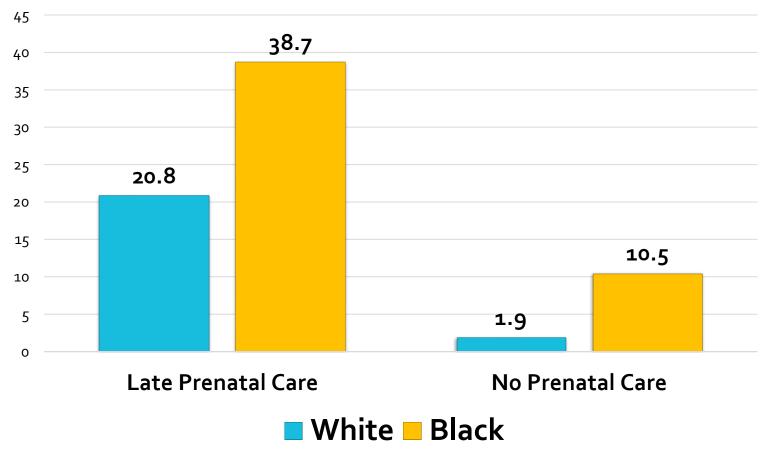
PERCENT OF MOTHERS RECEIVING NO PRENATAL CARE



Source: NC State Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health.

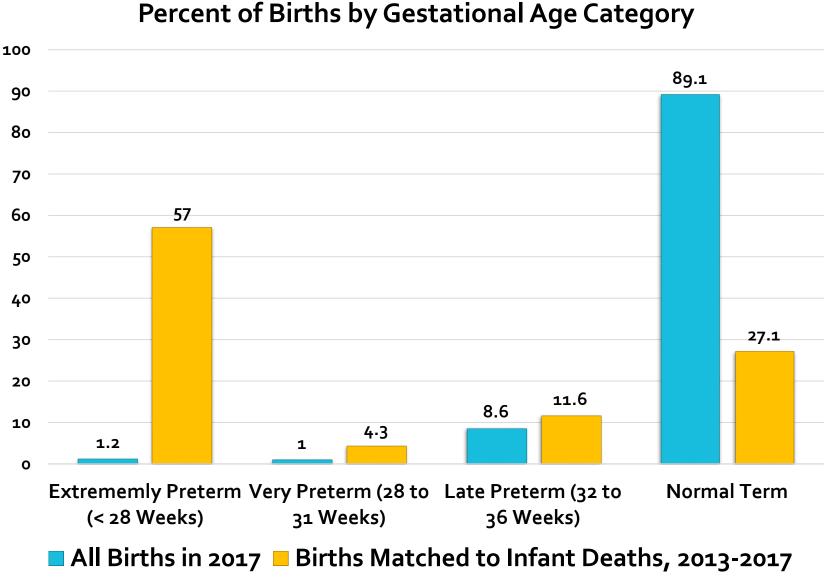
Prenatal Care

Percent of Mothers with Late or No Prenatal Care, by Race Matched Records, 2014-2017 Infant Deaths



Source: NC State Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health.

Gestational Age: Prematurity

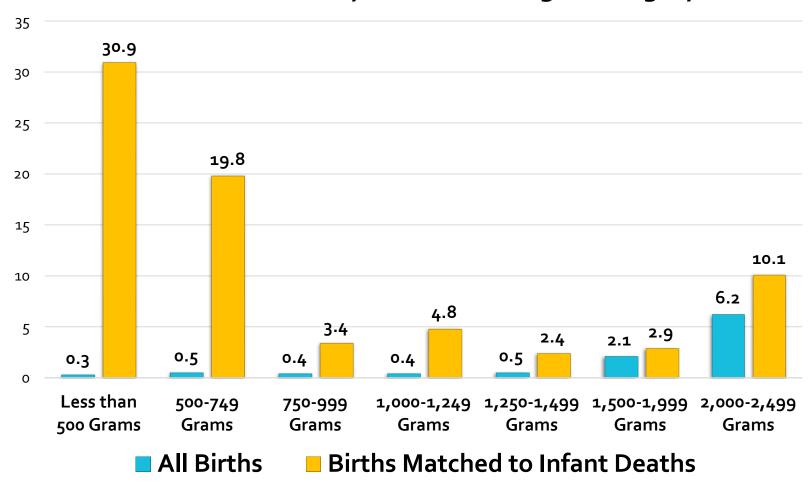


Source: NC State Center for Health Statistics.

Chart prepared by the GCDHHS, Division of Public Health.

Low Birthweight

Percent of Births by Low Birth Weight Category



Source: NC State Center for Health Statistics. Chart prepared by the GCDHHS, Division of Public Health.

Birthweight Distribution or Birthweightspecific Mortality Rates?

			, , , , , , , , , , , , , , , , , , , ,			
Black/African-American						
Birthweight	Births	Deaths	Birth Distribution	Mortality Rate		
200-499	46	40	0.005	869.565		
500-749	69	28	0.007	405.797		
750-999	58	4	0.006	68.966		
1,000-1,249	66	6	0.007	90.909		
1,250-1,499	81	3	0.008	37.037		
1,500-1,999	276	4	0.027	14.493		
2,000-2,499	787	11	0.078	13.977		
2,500-6,499	8714	24	0.863	2.754		
Total	10097	120	1.000	11.885		

Guilford County Deaths 2014-2017

White

Birthweight	Births	Deaths	Birth Distribution	Mortality Rate
200-499	21	16	0.002	761.905
500-749	13	6	0.001	461.538
750-999	24	2	0.002	83.333
1,000-1,249	28	3	0.003	107.143
1,250-1,499	35	1	0.004	28.571
1,500-1,999	137	1	0.014	7.299
2,000-2,499	417	9	0.042	21.583
2,500-6,499	9319	14	0.932	1.502
Total	9994	52	1.000	5.203

Source: NC State Center for Health Statistics.

Chart prepared by the GCDHHS, Division of Public Health.

Birthweight
Distribution or
Birthweightspecific
Mortality
Rates?

	% Due to differences in Birthweight Distribution	% due to differences in Birthweight Specific Mortality Rates
200-499	0.300	0.054
500-749	0.359	-0.034
750-999	0.038	-0.009
1,000-1,249	0.055	-0.011
1,250-1,499	0.022	0.007
1,500-1,999	0.022	0.022
2,000-2,499	0.096	-0.068
2,500-6,499	-0.022	0.168
Total	0.871	0.129

Source: NC State Center for Health Statistics.
Chart prepared by the GCDHHS, Division of Public Health.

Conclusions and Questions

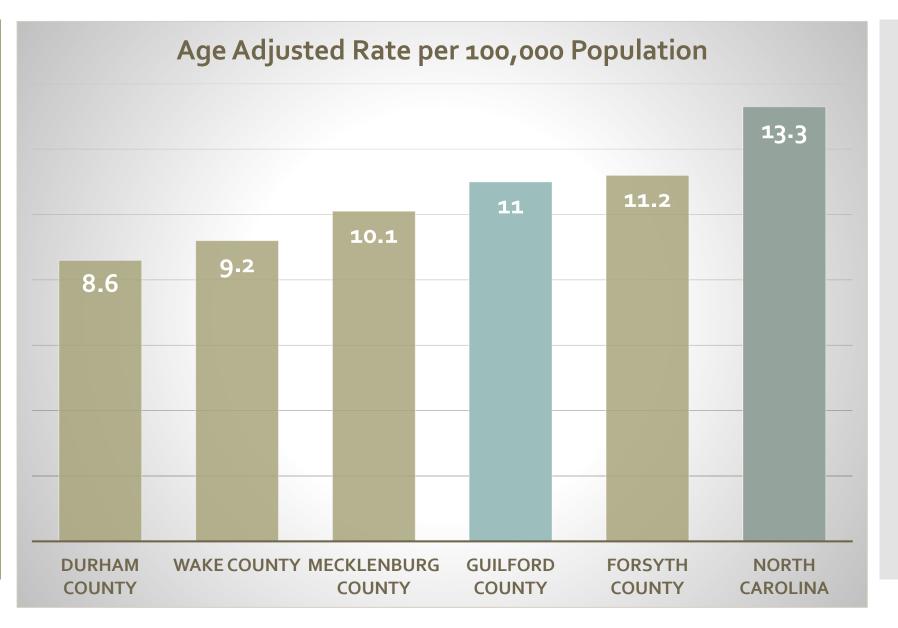
Conclusions:

- Vey little improvement in infant mortality over 20 years
- Persistent, large racial disparity in infant mortality
- <u>Question:</u> What are key issues in reducing disparities and improving birth outcomes?
- 1. Social determinants of health?
- 2. Toxic stress?
- 3. Pre-conceptional health?
- 4. Access to care issues?
- 5. Racism?

Mental Health in Guilford County

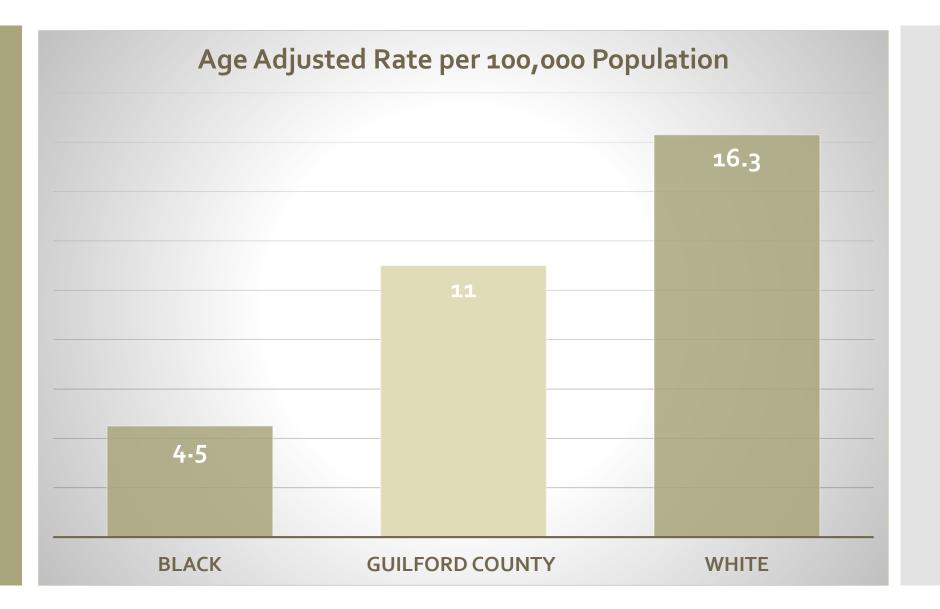
Guilford County 2019 Community Health Assessment Appendix D

Suicide mortality rates Guilford, NC and peer counties

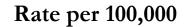


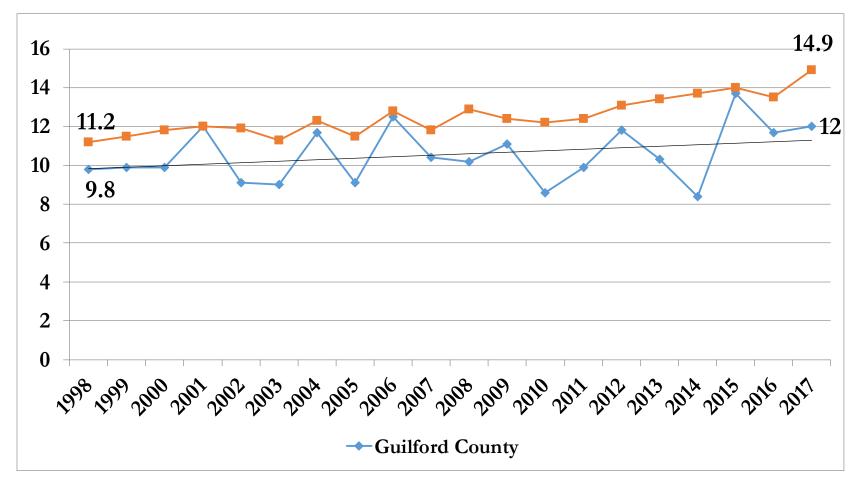
Source: County Health Dtabook, NC State Center for Health Statistics

Suicide mortality rates, by race



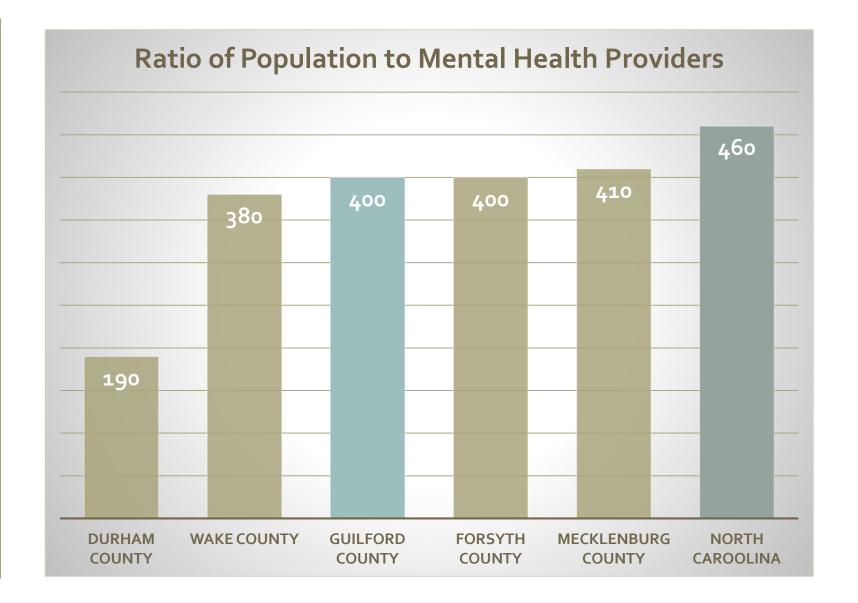
Suicide Mortality, Guilford County and NC, 1998-2017





Source: Data provided by the NC Center for Health Statistics.

Mental Health providers by county



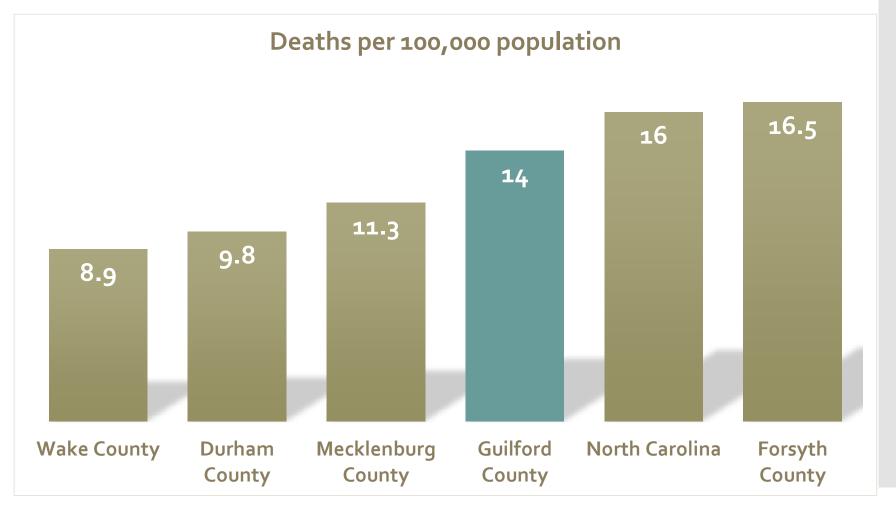
Opioid Dependence and Overdose

2019 Guilford County Community Health Assessment

Data for Opioid Issues

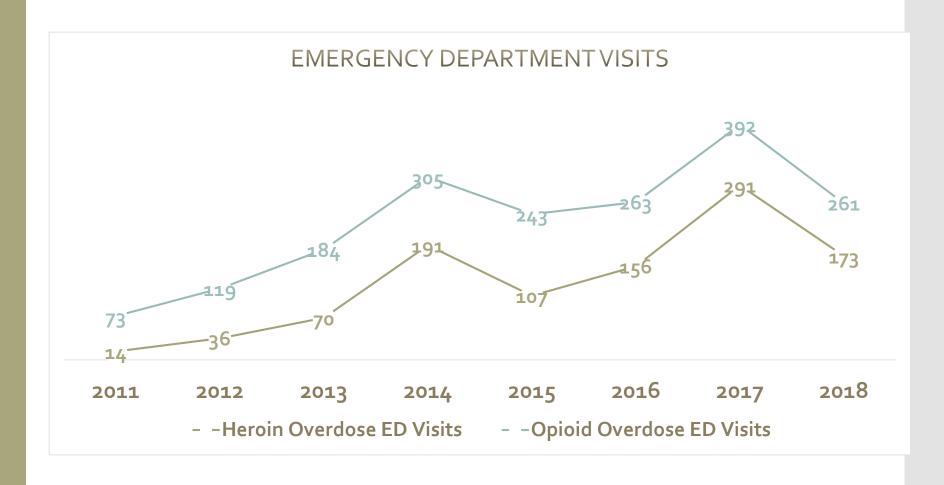
- Unintentional Poisoning Mortality Rates
- Opioid Mortality Rates
- Trends in opioid Emergency Department Visits
- Trends in Heroin-related Emergency Department Visits

Mortality due to Unintentional Drug Poisoning Guilford County, Peer Counties and NC



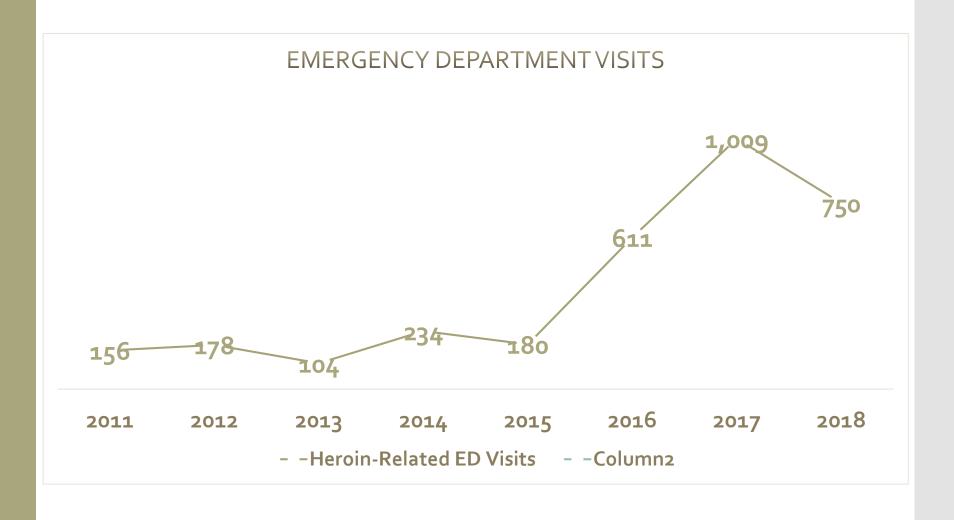
Source: County Health Databook, NC State Center for Health Statistics, 2013-2017. Chart prepared by GCDHHS, Public Health Division.

Trends in
Opioid-related
Overdose
Emergency
Department
Visits



Source: NC Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT). Chart prepared by GCDHHS, Public Health Division.

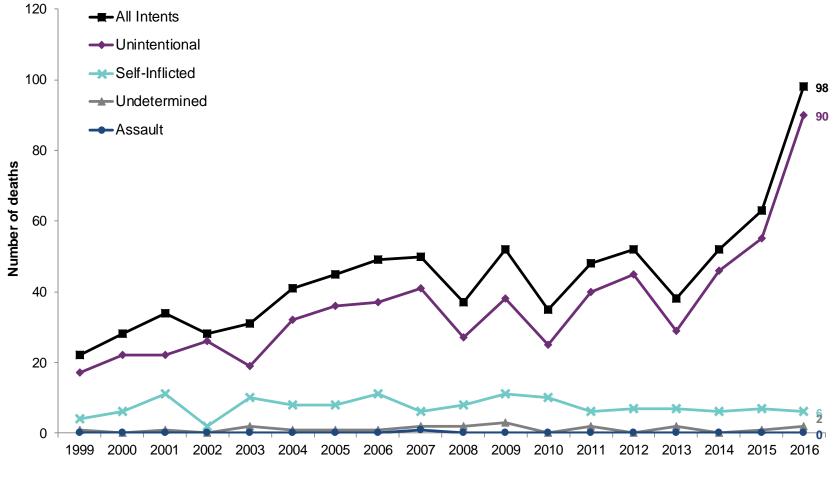
Heroin-related Emergency Department Visits



Source: NC Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT). Chart prepared by GCDHHS, Public Health Division.

Guilford County Medication & Drug Overdose Deaths by Intent

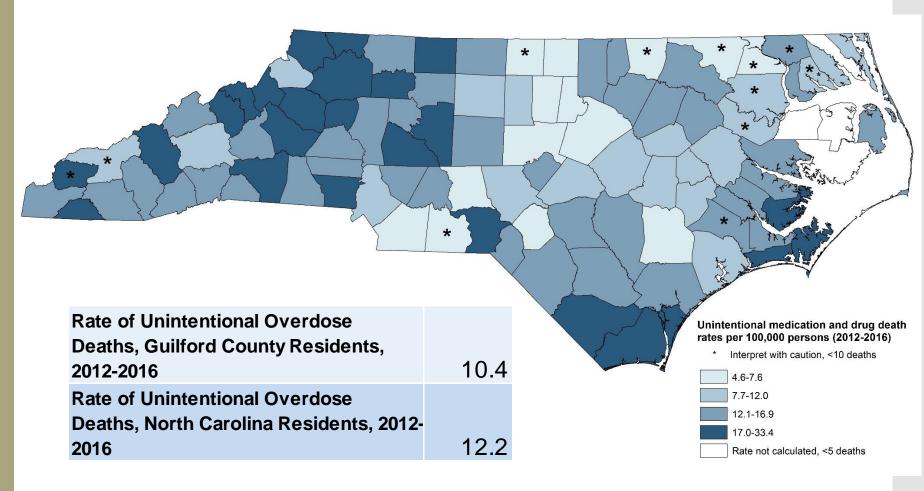
Guilford County Residents, 1999-2016



Source: N.C. State Center for Health Statistics, Vital Statistics-Deaths, 1999-2016 Medication and drug overdose: X40-X44, X60-X64, Y10-Y14, X85. Analysis by Injury Epidemiology and Surveillance Unit



Rate of Medication and Drug Overdose Deaths by County per 100,000 North Carolina Residents, 2012-2016



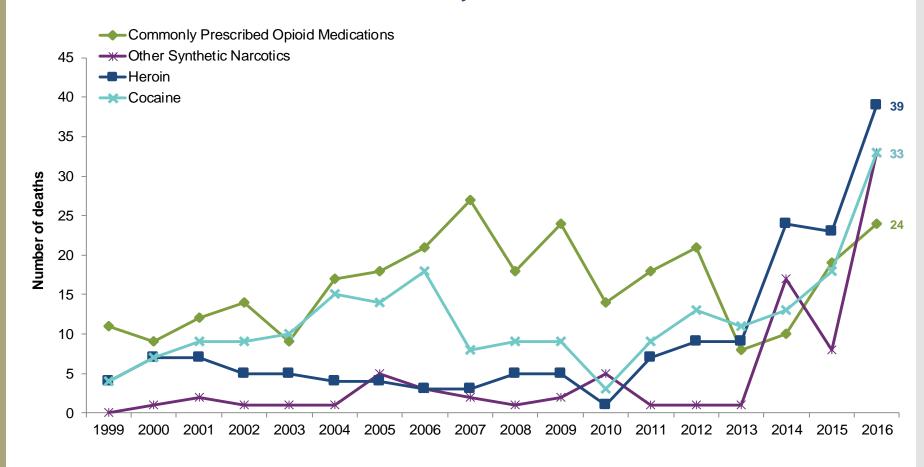
Source: Deaths-N.C. State Center for Health Statistics, Vital Statistics, 2012-2016, Unintentional medication and drug overdose: X40-X44/Population-National Center for Health Statistics, 2012-2016 Analysis by Injury Epidemiology and Surveillance Unit



Substances Contributing to Unintentional Overdose Deaths

Substances Contributing to Unintentional Medication and Drug Overdose Deaths, Guilford County, 1999-2016

Guilford County Residents, 1999-2016



Source: N.C. State Center for Health Statistics, Vital Statistics-Deaths, 1999-2016, Unintentional medication and drug overdose: X40-X44 with any mention of specific T-codes by drug type. Analysis by Injury Epidemiology and Surveillance Unit



^{*}These counts are not mutually exclusive. If the death involved multiple drugs it can be counted on multiple lines.

Demographics of Unintentional Medication & Drug Overdose Deaths



Guilford County
Demographics of
Unintentional
Medication & Drug
Overdose Deaths,
by Sex, Age: 20122016

	SEX		AGE				
	M	F	0-17	18-24	25-44	45-64	65+
Guilford County, Overall Population, 2012-2016	48%	52%	23%	11%	26%	26%	14%
Unintentional Overdose Deaths, Guilford County Residents, 2012-2016	67%	33%	0%	12%	49%	35%	3%
Unintentional Overdose Deaths, North Carolina Residents, 2012-2016	63%	37%	0%	9%	49%	39%	3%

Source: Deaths-N.C. State Center for Health Statistics, Vital Statistics, 2012-2016, Unintentional medication and drug overdose: X40-X44/Population-National Center for Health Statistics, 2012-2016 Analysis by Injury Epidemiology and Surveillance Unit



Guilford County Demographics of Unintentional Medication & Drug Overdose Deaths, by Race/Ethnicity: 2012-2016

	RACE					
				Am.		
	White	Black	Asian	Indian	Hisp.	
Guilford County, Overall Population, 2012-2016	53%	34%	5%	0%	8%	
Unintentional Overdose Deaths, Guilford County Residents, 2012-2016	76%	21%	0%	1%	1%	
Unintentional Overdose Deaths, North Carolina Residents, 2012-2016	85%	11%	0%	2%	2%	



Economic and Societal Costs of Medication & Drug Overdose Deaths



Estimated Total
Lifetime Cost of
Medical and
Work Loss from
Medication &
Drug Fatalities
All intents, 2016

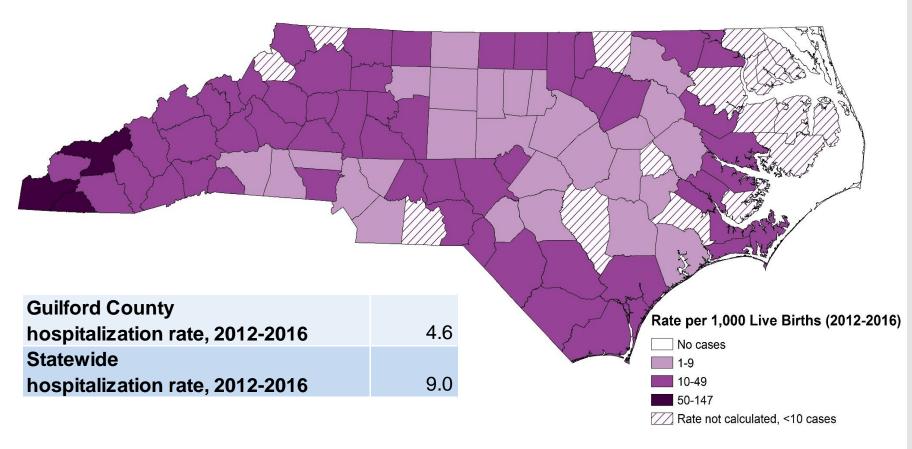
Total Medical Costs in Guilford	
County, 2016	\$ 552,004
Total Work Loss Costs in	
Guilford County, 2016	\$ 122,776,900
Combined Cost	\$ 123,328,904

Cost per capita in Guilford	
County, 2016	\$ 236.57

Source: Deaths-N.C. State Center for Health Statistics, Vital Statistics, 2016, Unintentional medication and drug overdose: X40-X44/Population-National Center for Health Statistics, 2016/Economic impact-CDC WISQARS, Cost of Injury Reports, National Center for Injury Prevention and Control, CDC for all medication and drug deaths (any intent), Base year (2010) costs indexed to state 2015 prices. Analysis by Injury Epidemiology and Surveillance Unit



Hospitalizations Associated with Drug Withdrawal Syndrome in Newborns per 1,000 Live Births, North Carolina Residents, 2012-2016



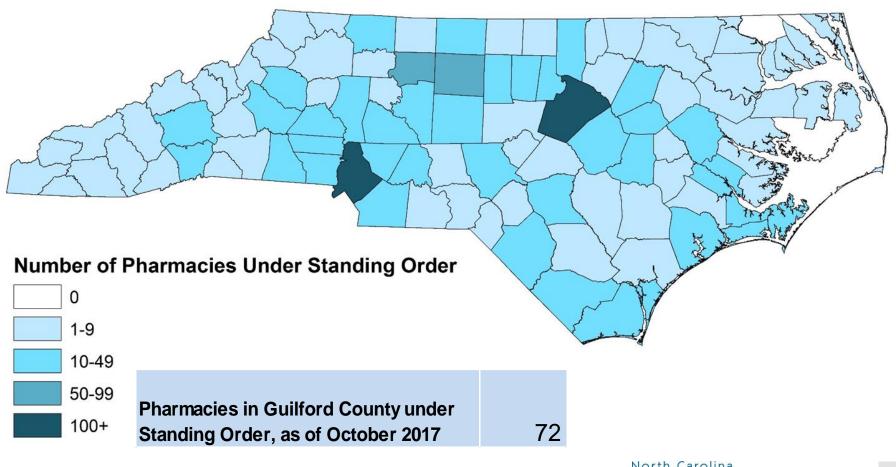
NOTE: 2014 data structure changed to include up to 95 diagnosis codes. 2015 ICD 9 CM coding system transitioned to ICD10 CM. The impact of these changes on surveillance is unclear.



Prevention, Treatment, and Harm Reduction



Number of
Pharmacies under
Standing Order by
County
October 2017
(N=1,407)



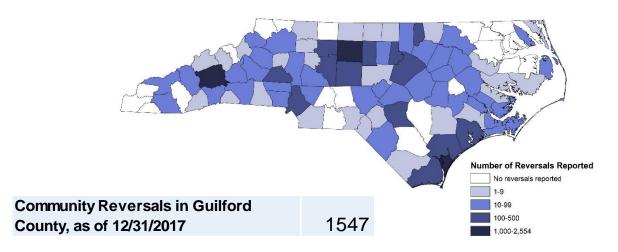
Source: Division of Public Health, October 2017 Analysis: Injury Epidemiology and Surveillance Unit



Opioid Overdose Reversals with Naloxone

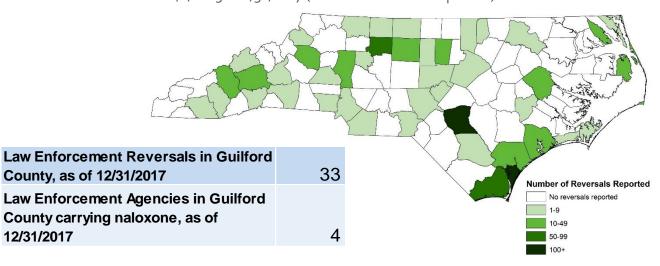
Community naloxone reversals reported to the NC Harm Reduction Coalition:

8/1/2013 - 12/31/2017 (9,632 total reversals reported)



Law Enforcement naloxone reversals reported to the NC Harm Reduction Coalition:

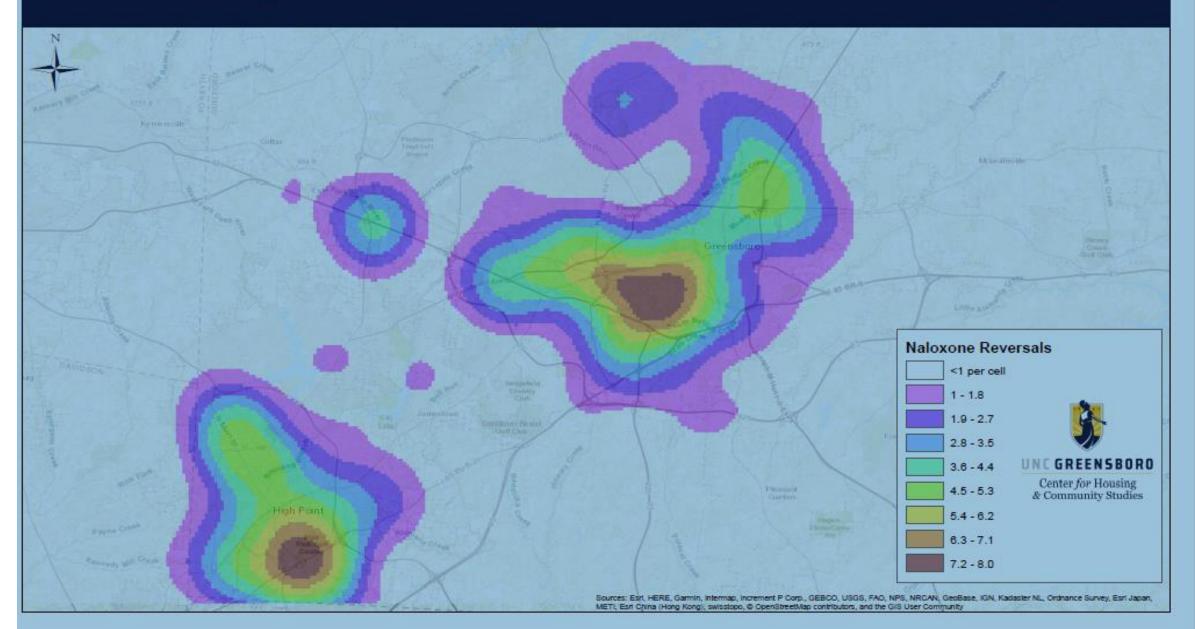
1/1/2015 - 12/31/2017 (821 total reversals reported)



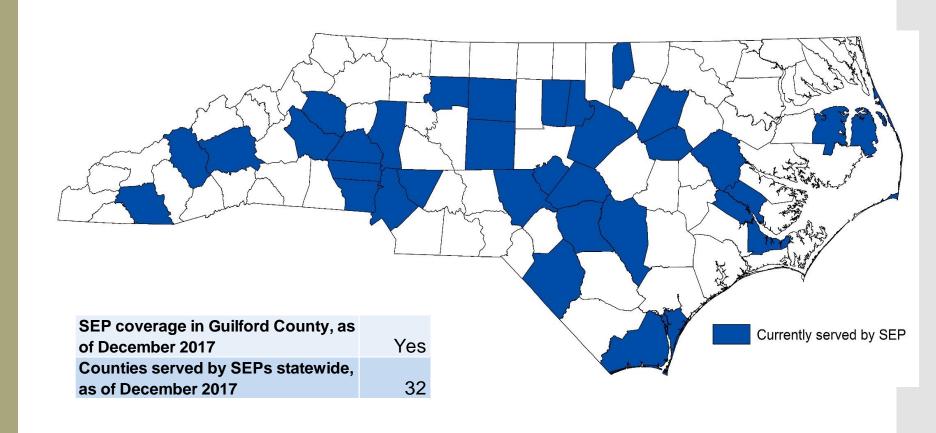
Source: North Carolina Harm Reduction Coalition, January 2018
Analysis: Injury Epidemiology and Surveillance Unit



Density of Naloxone Reversals in Guilford County



Counties Currently Served by Syringe Exchange Programs (SEPs) December 2017 (26 active* SEPs)

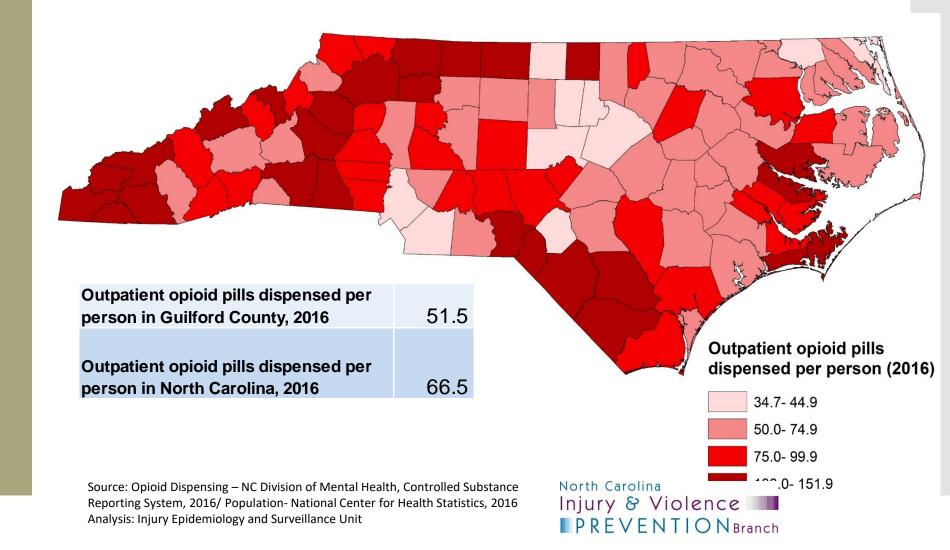


North Carolina

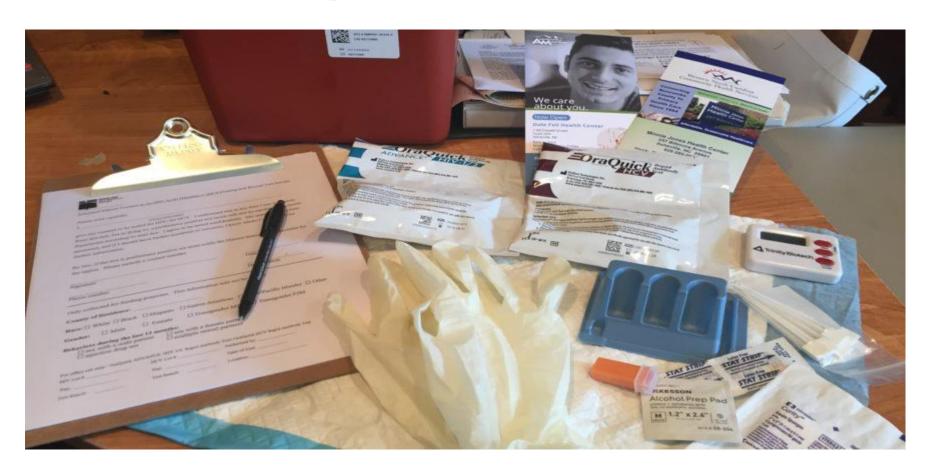
Injury & Violence PREVENTION Branch

Source: North Carolina Division of Public Health, January 2018 Analysis: Injury Epidemiology and Surveillance Unit

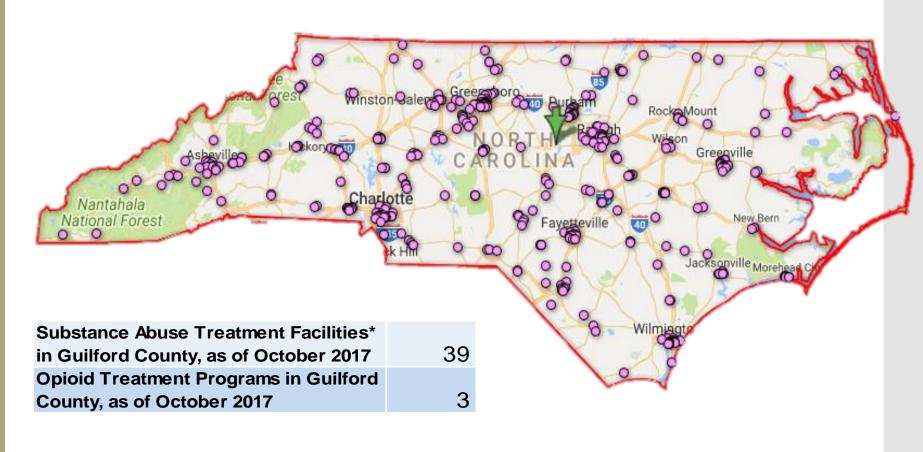
Rate of Outpatient Opioid Pills Dispensed by County per North Carolina Resident, 2016



Tackling the Opioid Epidemic



Availability
of Substance
Abuse
Treatment
Facilities,
SAMHSA



^{*}Substance abuse treatment facilities must meet certain eligibility criteria to be listed on the SAMHSA website; not all facilities are in-patient; see notes for more details.

Source: Behavioral Health Treatment Services Locator – SAMHSA, Substance Abuse Treatment Facilities, Accessed 10/2017. Medication Assisted Therapy, Opioid Treatment Program Directory – SAMHSA, Accessed 10/2017.



NORTH CAROLINA'S OPIOID ACTION PLAN

2017-2021

Primary Strategies of the State's Plan

- Reduce the oversupply of prescription opioids
- Reduce the diversion of prescription drugs and the flow of illicit drugs
- Increase community awareness and prevention
- Make naloxone widely available
- Expand treatment and recovery systems of care

https://www.ncdhhs.gov/about/department-initiatives/opioid-epidemic

NORTH CAROLINA OPIOID ACTION PLAN(2017-2021) Prescription Drug Abuse Advisory Committee (PDAAC)

	Metrics Metrics	Current Data	2021 Trend/ Goal
	OVERALL		
	Number of unintentional opioid-related deaths (ICD10)	1,194 (2016, provisional)	20% reduction in expected 2021 number
	Rate of opioid ED visits (all intents)	38.2 per 100,000 residents (2015)	20% reduction in expected 2021 number
A	Reduce Oversupply of Prescription Opioids		
	Rate of multiple provider episodes for prescription opioids (times patients received opioids from >/=5 prescribers dispensed at >/=5 pharmacies in a six-month period), per 100,000 residents	27.3 per 100,000 residents (2015)	Decreasing trend
	Total number of opioid pills dispensed	555,916,512 (2016)	Decreasing trend
	Percent of patients receiving more than an average daily dose of >90 MME of opioid analgesics, per quarter	12.3% (Q1 2017)	Decreasing trend
	Percent of prescription days any patient had at least one opioid AND at least one benzodiazepine prescription on the same day, per quarter	21.1% (Q1 2017)	Decreasing trend
	Reduce Diversion/ Flow of Illicit Drugs		
	Percent of opioid deaths involving heroin or fentanyl/ fentanyl analogues	58.4% (2016, provisional)	
	Number of acute Hepatitis C cases	182 (2016, provisional)	Decreasing trend
	Increase Access to Naloxone		
7	Number of EMS naloxone administrations	13,069 (2016)	
	Number of community naloxone reversals	3,616 (2016)	Increasing trend
	Treatment and Recovery		
	Number of buprenorphine prescriptions dispensed	467,243 (2016)	Increasing trend
	Number of uninsured individuals with an opioid use disorder served by treatment programs	12,248 (SFY16)	Increasing trend
X	Number of certified peer support specialists (CPSS) across NC	2,383 (2016)	Increasing trend



strategy area link to the left. Each metric also links to the Technical Notes for those who'd like to get into the nitty gritty details of the data.

Opioid deaths decrease in Guilford County less than a year after program's launch

GREENSBORO — In the midst of the opioid epidemic, Guilford County saw a decrease in the number of deaths last year caused by the narcotics.

In 2018, 912 opioid calls that Guilford County paramedics responded to ended in 79 deaths, according to Emergency Services Director Jim Albright. That's 35 fewer than the previous year, though the number of overdoses increased by 217 calls.

The opioid epidemic has been a concern in Guilford County since 2014.

Local Initiatives







GCSTOP Outcomes

MARCH 2018-APRIL 2019

Life Saving

228,020

Distributed Collected Naloxone Treatment











447

Participant Counts



Review

"I would not be alive if my husband had not performed cpr while waiting on first responders to arrive and administer Narcan... 3 doses later I woke up... not long after that I received a package from GCSTOP with Narcan and other harm reduction items... then I had another overdose where my husband administered the narcan from GCSTOP and saved my life...After my 3rd or 4th overdose I received a phone call from an employee, Guillermo, where I was informed of all the wonderful options and things offered by this amazing community outreach program... we talked for probably 45 minutes...it gave me a glimmer of hope in such a dark time in my life... I am working on 8 months clean and have a life I never dreamed"

HARM REDUCTION SAVES LIVES

Behavioral Health Issues

Close to 3.9% of adults in North Carolina (according to <u>SAMHSA</u>) live with serious mental health conditions such as <u>schizophrenia</u>, <u>bipolar disorder</u>, and <u>major depression</u>.

Only 48.2% of adults with mental illness in North Carolina receive any form of treatment from either the public system or private providers (according to <u>SAMHSA</u>). The remaining 51.8% receive no mental health treatment. According to <u>Mental Health America</u>, North Carolina is ranked 33 out of the 50 states and Washington D.C. for providing access to mental health services.

Mental health and substance use disorders are among the top conditions for disability and burden of disease, as well as cost to families, employers, and publicly funded health systems in the United States and worldwide. In 2014, approximately one in five adults in North Carolina had a diagnosable mental, behavioral, or emotional disorder during the past year and one in twelve adults was dependent on or abusing alcohol or illegal drugs.*

* 2016 Report from the NCIOM Task Force on Mental Health and Substance Use. North Carolina Medical Journal November-December 2016 vol. 77 no. 6 437-440

North Carolina Adolescent Mental Health Facts

Depression symptoms among high school students (grades 9-12), 2017 MH1

Percent of high school students who report they felt sad or hopeless almost every day for 2 or more weeks in a row so that they stopped doing some usual activities (during the 12 months before the survey)	North Carolina	United States
Total	29%	31%
Male	20%	21%
Female	39%	41%

Depressive episodes, ages 12-17, 2015-2016 MH2

Percent of adolescents ages 12-17 who report they had at least 1 major depressive episode ¹ (during the 12 months before the survey)	North Carolina	United States
Total	12%	13%

Suicidal thoughts, attempts, and related injuries among high school students (grades 9-12), 2017 MH1

Percent of high school students who report they attempted suicide 1 or more times (during the 12 months before the survey)	North Carolina	United States
Total	8%	7%
Male	6%	5%
Female	10%	9%

Percent of high school students who report they seriously considered attempting suicide (during the 12 months before the survey)	North Carolina	United States
Total	16%	17%
Male	11%	12%
Female	21%	22%

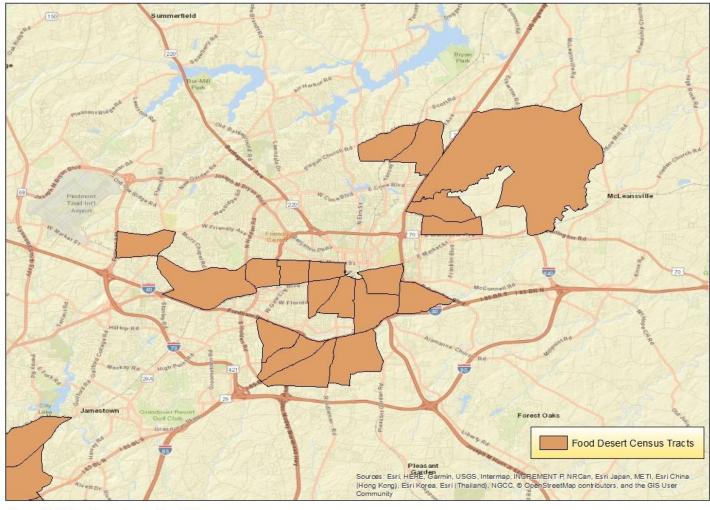
Percent of high school students who report they attempted suicide resulting in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (during the 12 months before the survey)	North Carolina	United States
Total	3%	2%
Male	3%	2%
Female	3%	3%

Healthy Eating and Active Living in Guilford County

2019 Guilford County Community Health Assessment
Appendix E

Access to Healthy Food

Food Desert Census Tracts in Guilford County

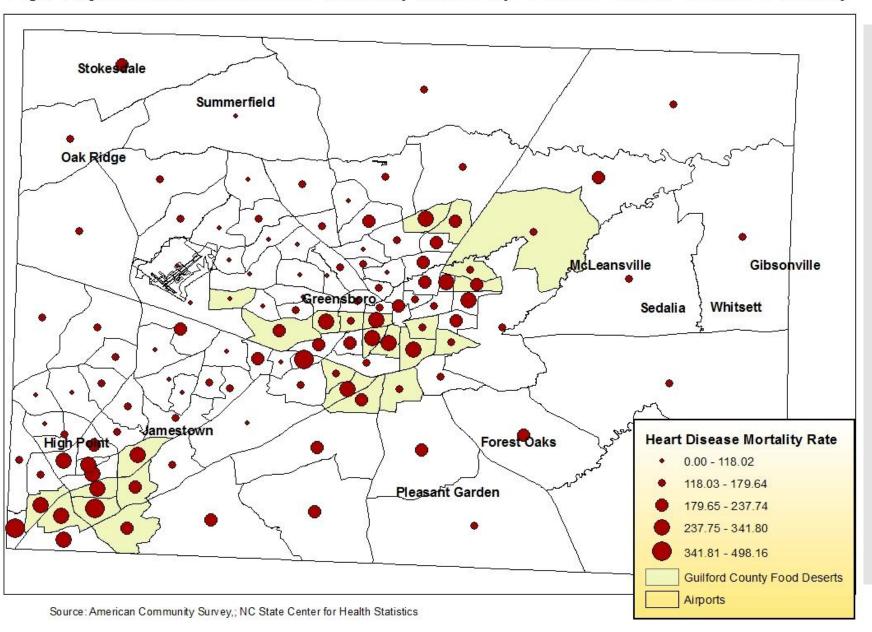


Source: USDA Food Desert Locator Map, 2015

Map prepared by the GCDHHS, Division of Public Health.

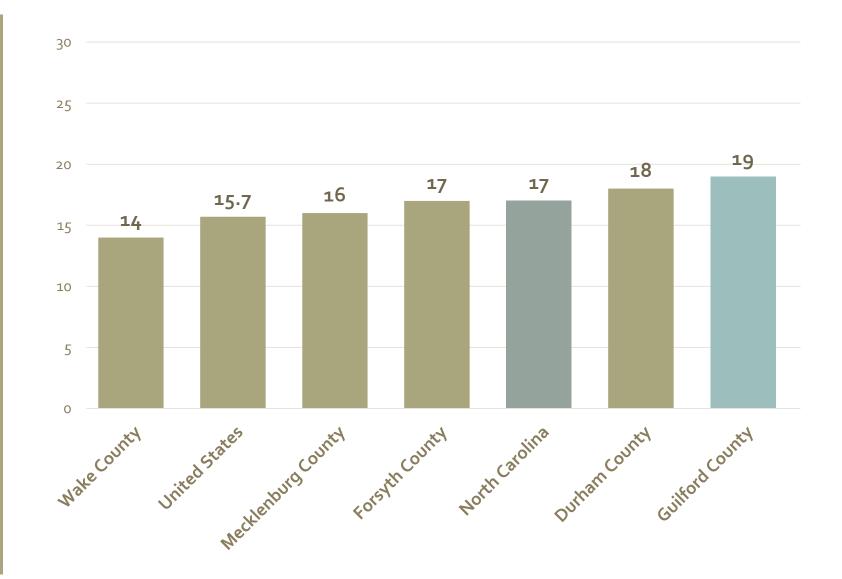
Age-Adjusted Heart Disease Mortality Rates by Census Tract, Guilford County

Why is it an important health issue?



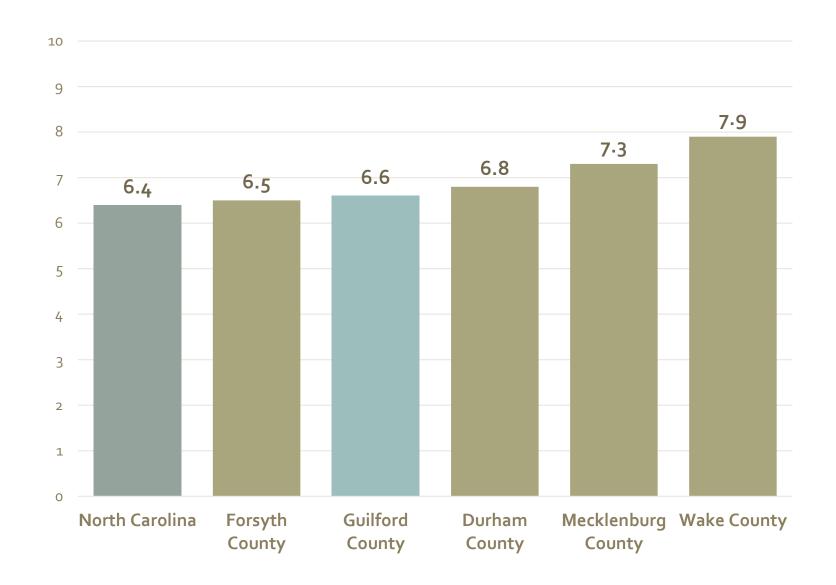
Map prepared by the GCDHHS, Division of Public Health.

Percentage of persons experiencing food insecurity by county

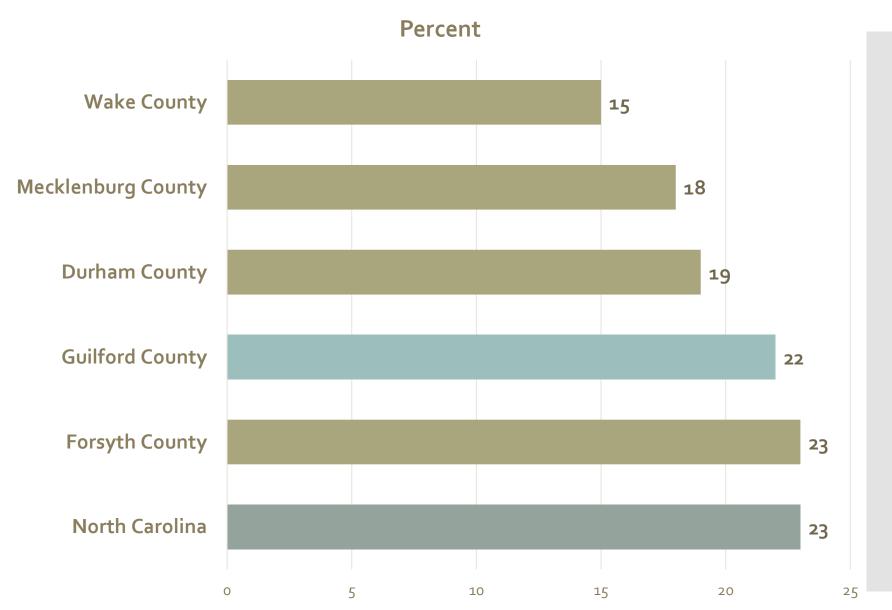


Sources: County Health Rankings BRFSS 2017, USDA 2017 (US Rate). Chart prepared by the GCDHHS, Division of Public Health.

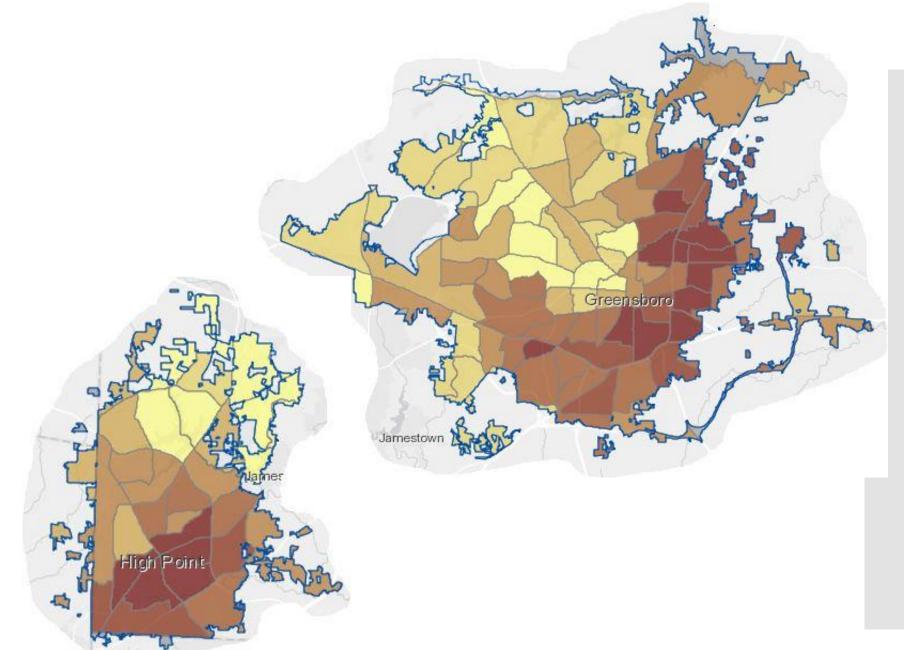
Food environment index, county comparisons



Sources: County Health Rankings BRFSS 2017. Chart prepared by the GCDHHS, Division of Public Health. Percent engaging in no Leisure-Time Physical Activity



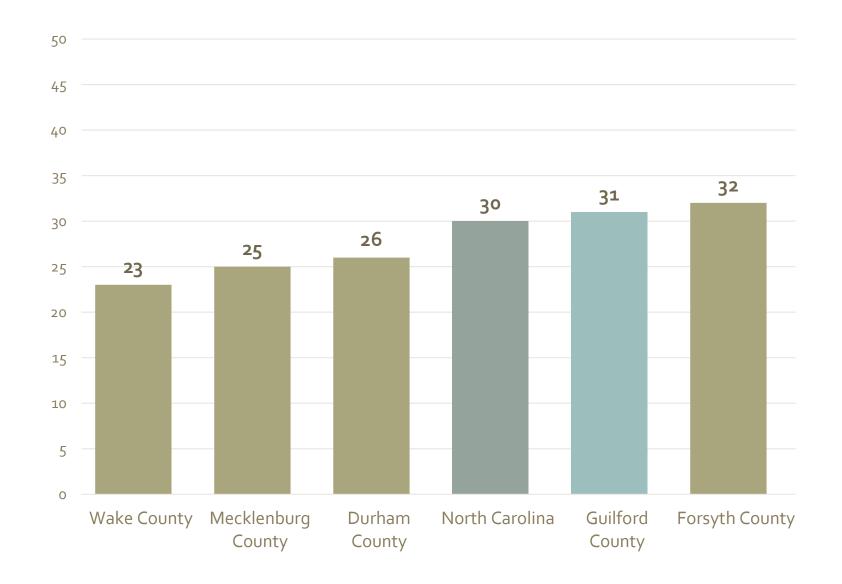
Sources: County Health Rankings BRFSS 2017. Chart prepared by the GCDHHS, Division of Public Health. No leisuretime physical activity by census tract



Source: CDC 500 Cities Project, 2016.

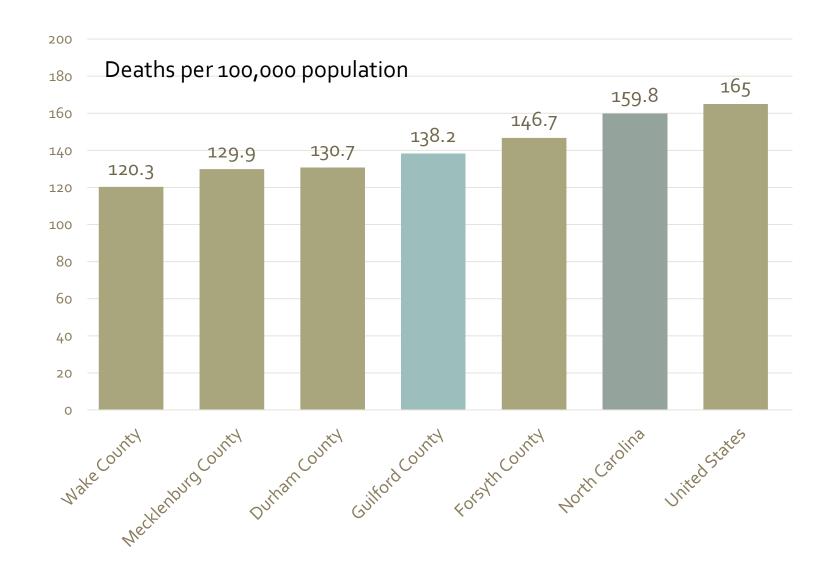
Chart prepared by the GCDHHS, Division of Public Health.

Percentage of adult obesity, county comparisons



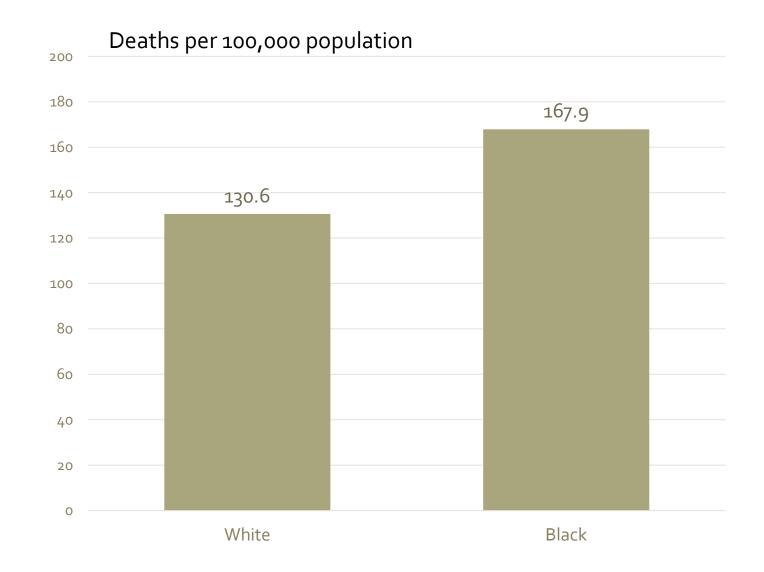
Sources: County Health Rankings BRFSS 2017, CDC Report 2015-2016 (US Rate). Chart prepared by the GCDHHS, Division of Public Health.

Age-adjusted heart disease mortality rates by county

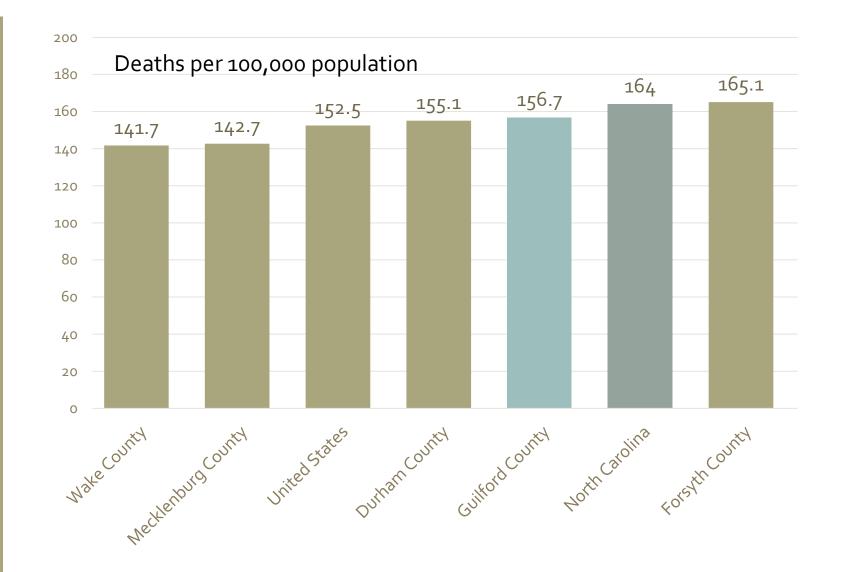


Sources: SCHS Databook, 2013-2017, CDC Report 2017 (US Rate). Chart prepared by the GCDHHS, Division of Public Health.

Age-adjusted heart disease mortality rates by race

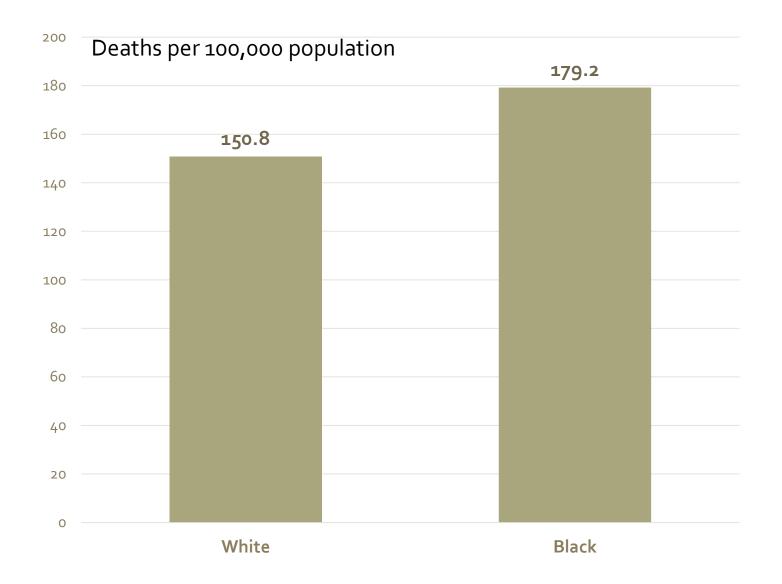


Sources: SCHS Databook, 2013-2017. Chart prepared by the GCDHHS, Division of Public Health. Age-adjusted cancer mortality rates by county

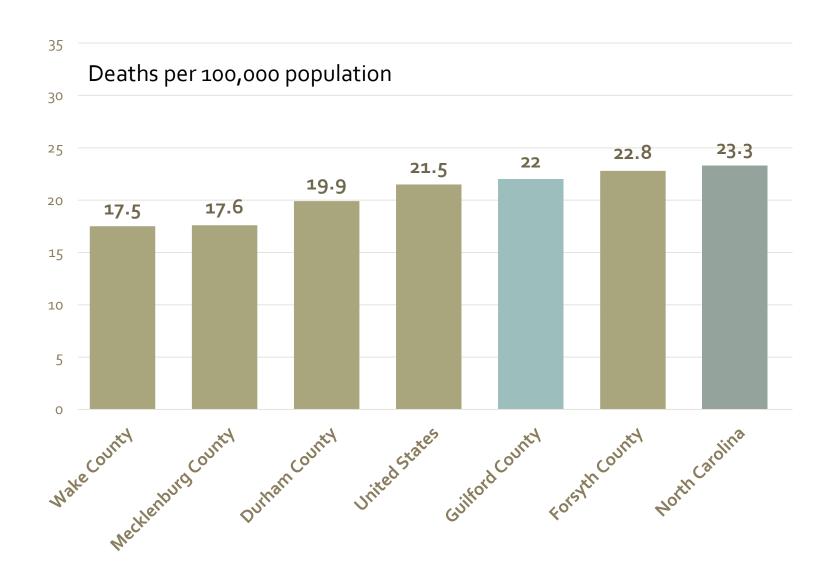


Sources: SCHS Databook, 2013-2017, CDC Report 2017 (US Rate). Chart prepared by the GCDHHS, Division of Public Health.

Age-adjusted cancer mortality rates by race

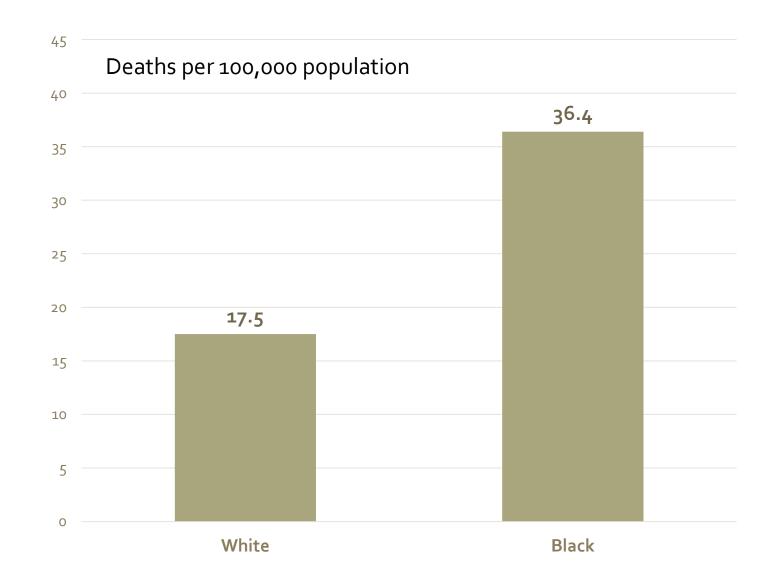


Sources: SCHS Databook, 2013-2017. Chart prepared by the GCDHHS, Division of Public Health. Age-adjusted diabetes mortality rates by county



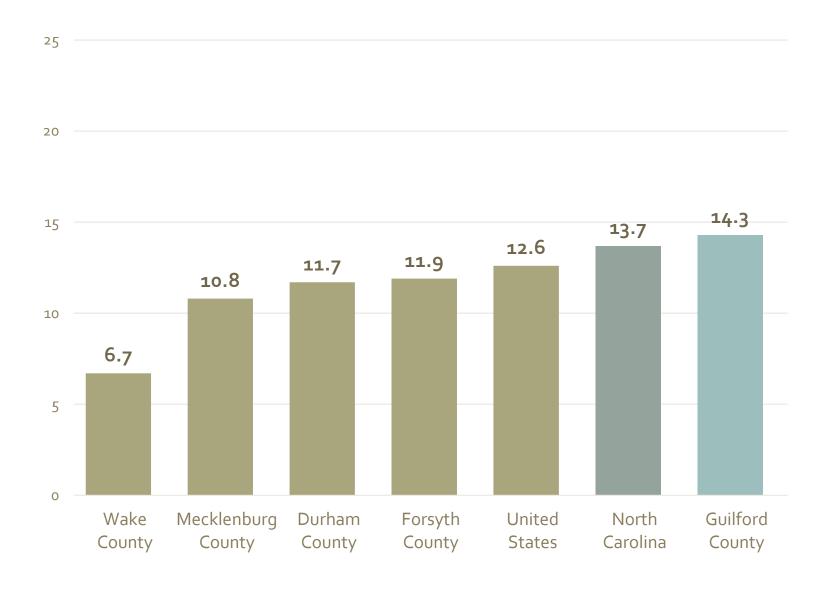
Sources: SCHS Databook, 2013-2017, CDC Report 2017 (US Rate). Chart prepared by the GCDHHS, Division of Public Health.

Age-adjusted diabetes mortality rates by race



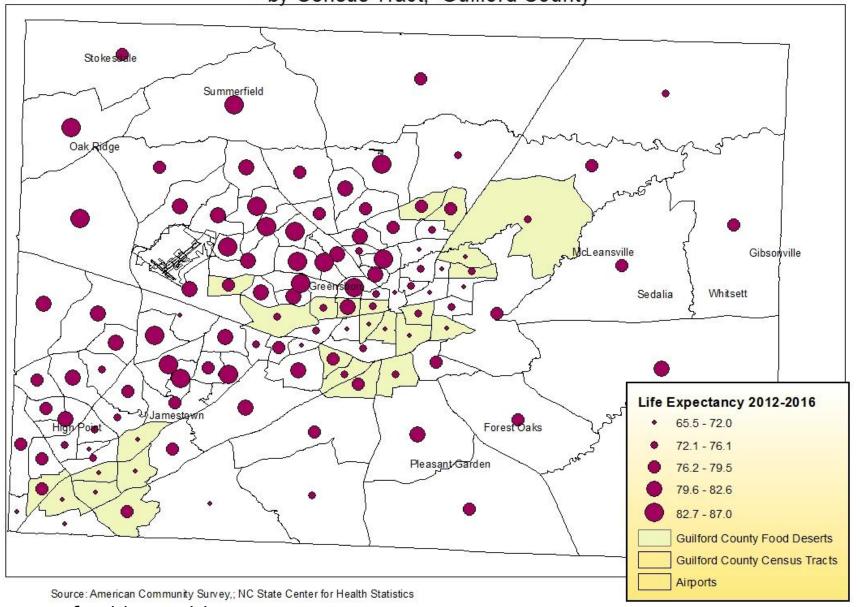
Sources: NC State Center for Health Statistics County Databook, 2013-2017. Chart prepared by the GCDHHS, Division of Public Health.

Percent of households with SNAP benefits, county comparisons



Sources: American Community Survey 2013-2017. Chart prepared by the GCDHHS, Division of Public Health. Life Expectancy and Food Deserts in Guilford County
by Census Tract, Guilford County

Food Deserts and Life Expectancy



Map prepared by the GCDHHS, Division of Public Health.

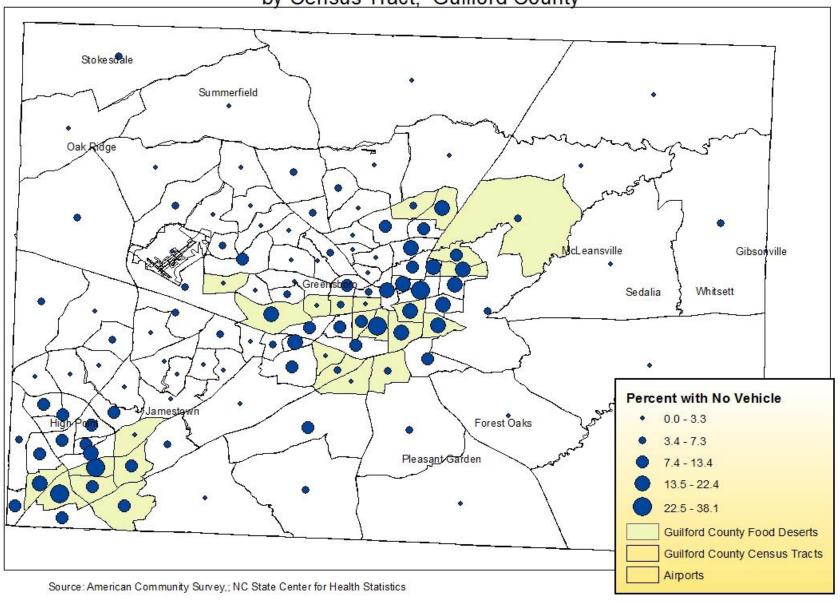
Food Deserts and SNAP Households

by Census Tract, Guilford County Sto ke sdale Summerfield Gibsonville Sedalia Whitsett Percent SNAP Households Forest Oaks 0.0 - 4.7 4.8 - 11.5 Pleasant Garden 11.6 - 22.5 22.6 - 36.9 37.0 - 59.7 Guilford County Food Deserts **Guilford County Census Tracts** Airports Source: American Community Survey,; NC State Center for Health Statistics

Food Deserts in Guilford County and Percent of Households with SNAP

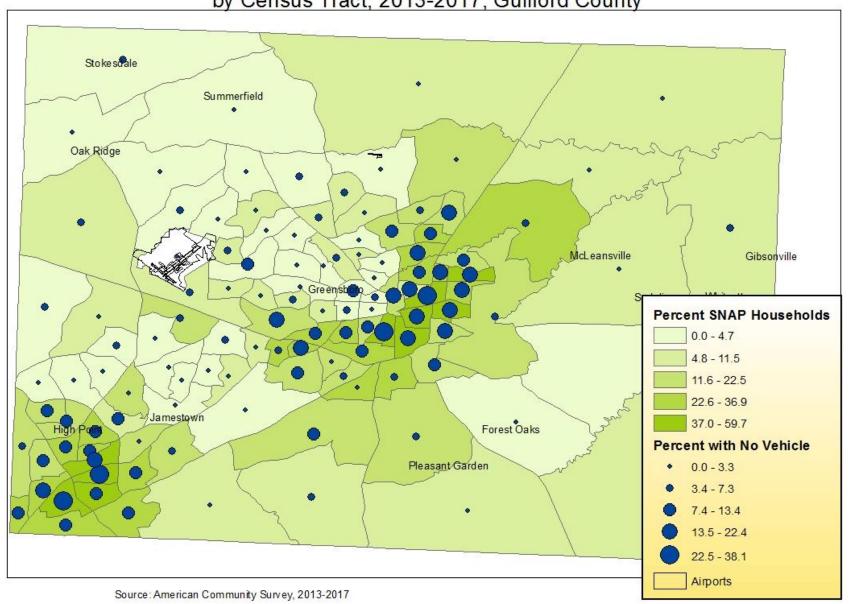
Food Deserts in Guilford County and Percent of Households with No Vehicle Available by Census Tract, Guilford County

Food Deserts and Households with No Vehicle Available



Percent of Households with SNAP, with No Vehicle Available Percentage by Census Tract, 2013-2017, Guilford County

Percent of
Households
with SNAP and
Households
with No
Wehicle
Available



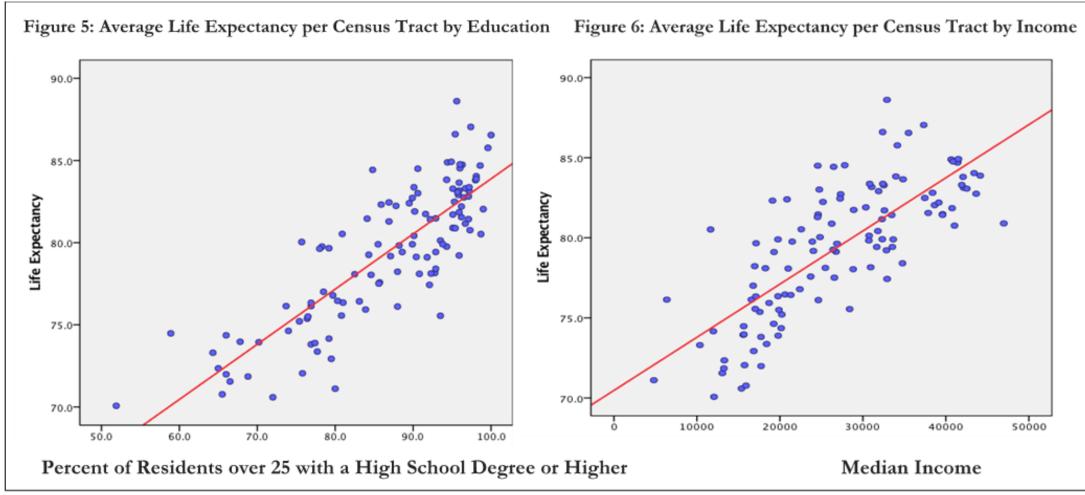
Going Forward

- What are the key issues that need to be addressed in order to "move the needle" on improved nutrition and physical activity?
- Are there gaps and needs in programs and policies that need to be looked at?
- What is working to promote healthy eating and active living?
- What are promising approaches that could be taken?

2019 Guilford County Community Health Assessment

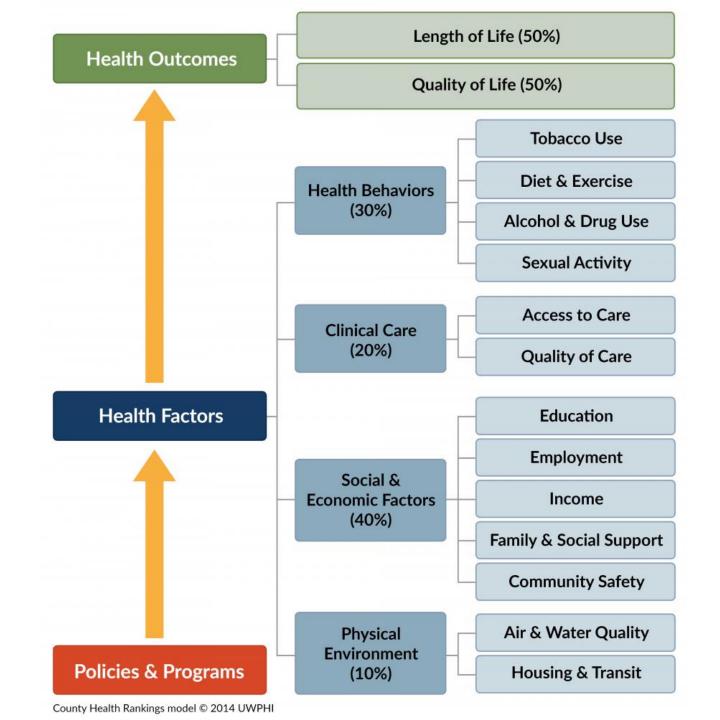
Appendix F1

Education and Economic Health



Sources: US Census Bureau, American Community Survey 2009-2013; North Carolina State Center for Health Statistics, 2013*[4-7].

Why are Social Determinants of Health Important?

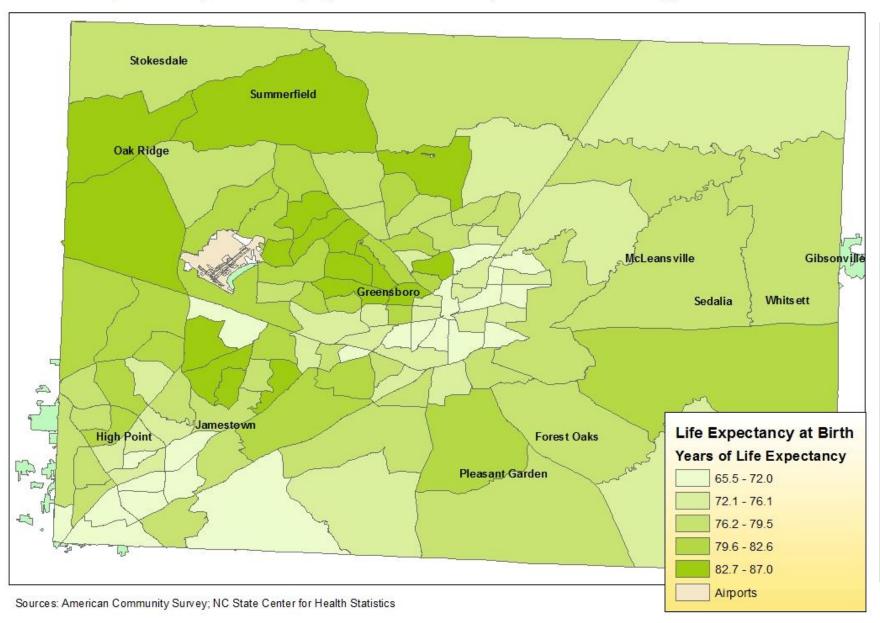


Education and Economic Health

2019 Guilford County Community Health Assessment

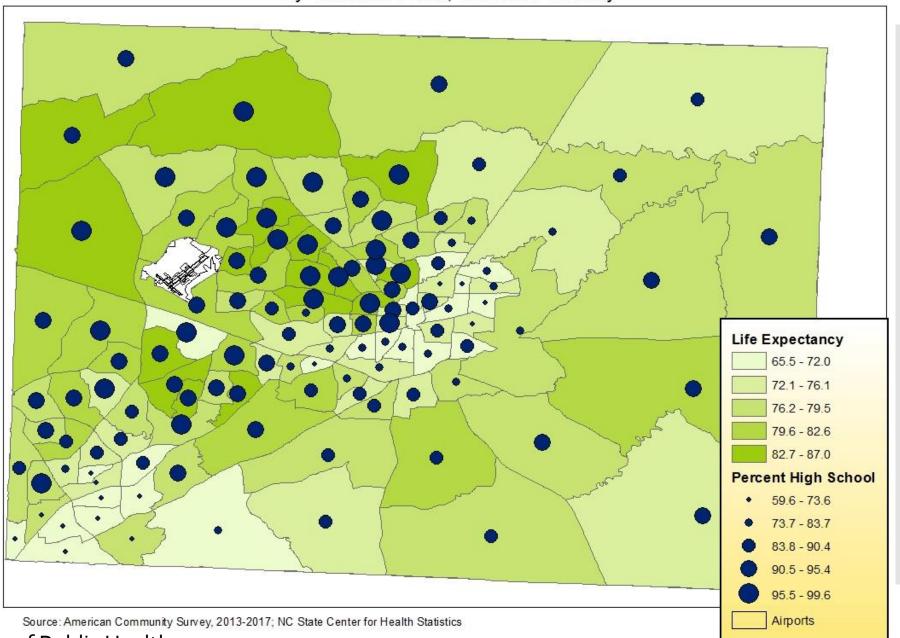
Life Expectancy at Birth, by Census Tract, Guilford County, 2012-2016

Life
Expectancy at
Birth by
Census Tract



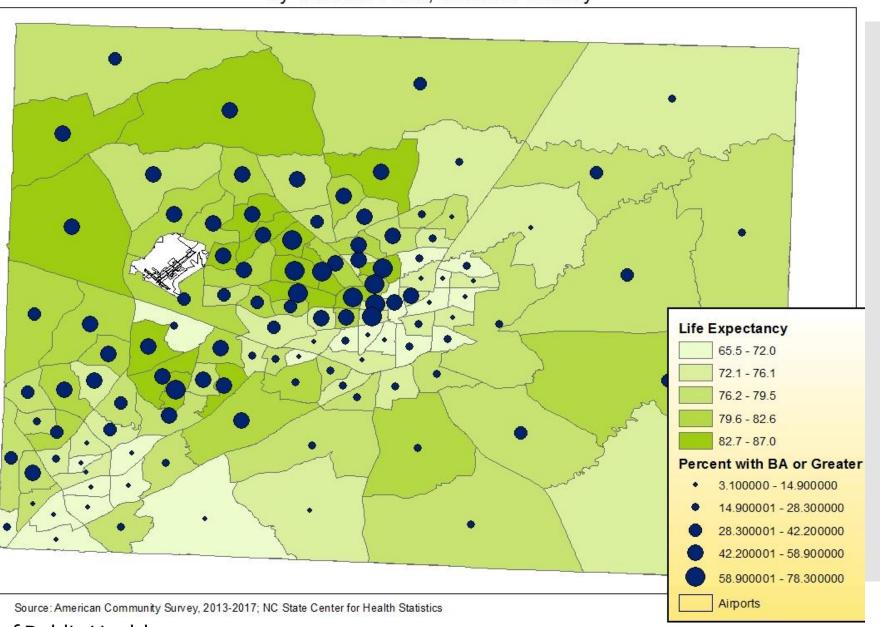
Life Expectancy and Percent with High School or Greater, by Census Tract by Census Tract, Guilford County

Education and Life Expectancy



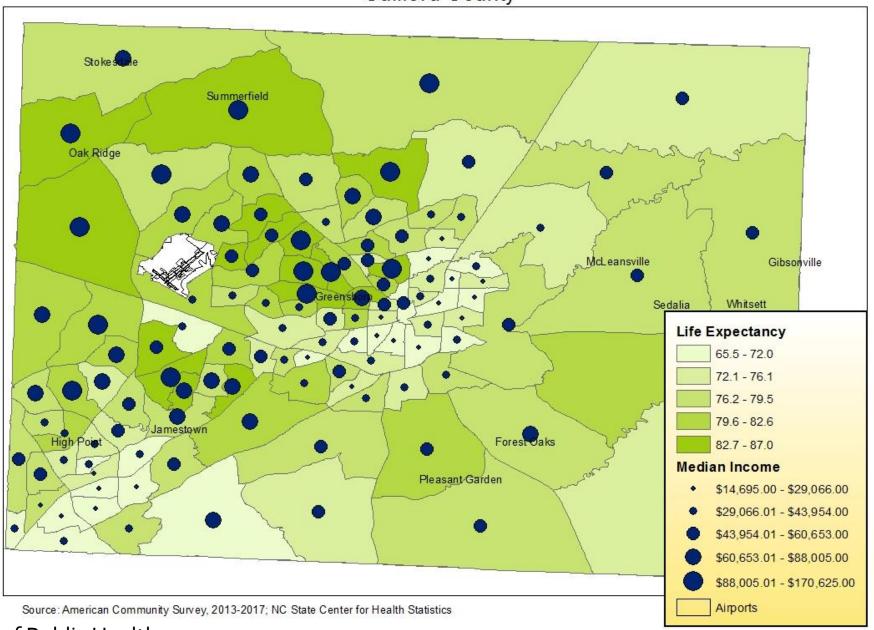
Life Expectancy and Percent with BA or Greater, by Census Tract by Census Tract, Guilford County

Education and Life Expectancy



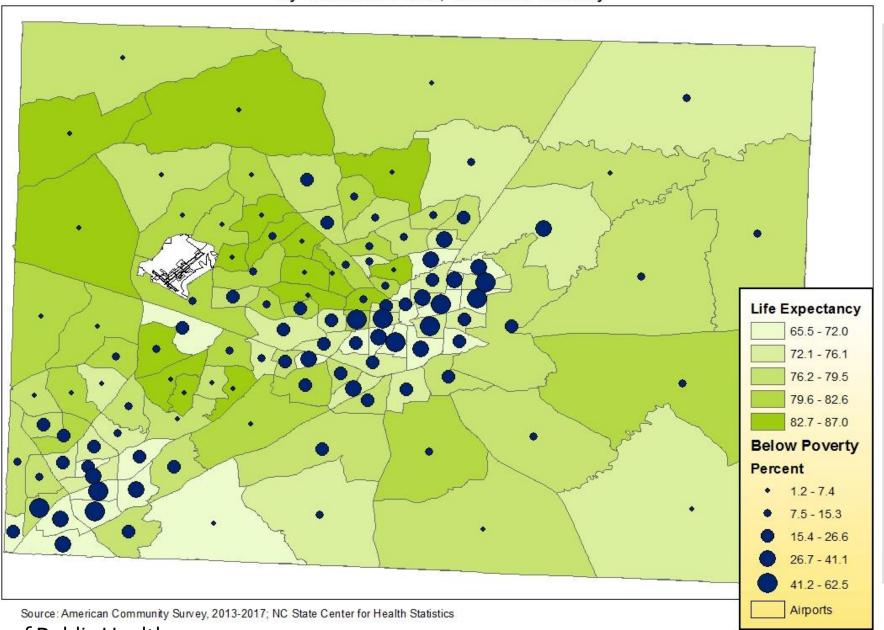
Life Expectancy and Median Household Income, by Census Tract, Guilford County

Income and Life Expectancy



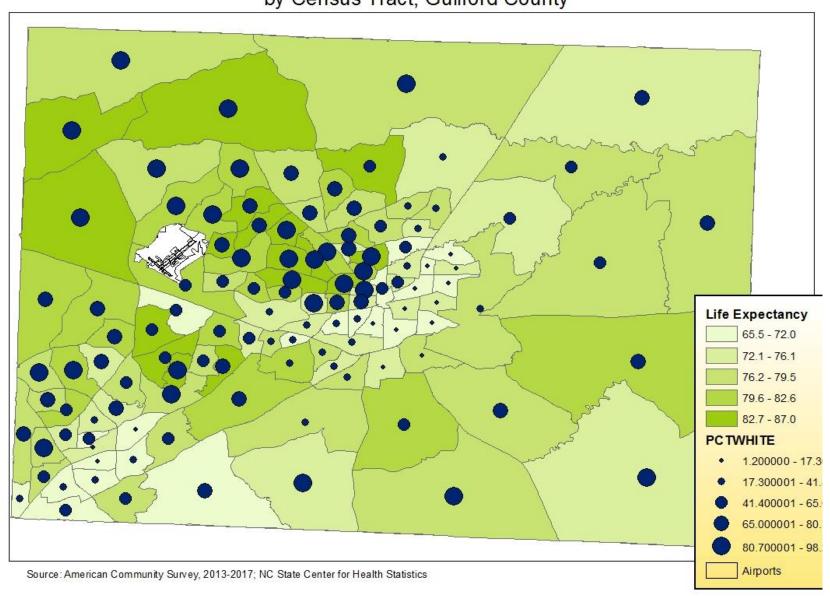
Life Expectancy and Percent of Persons in Poverty, by Census Tract by Census Tract, Guilford County

Poverty and Life Expectancy



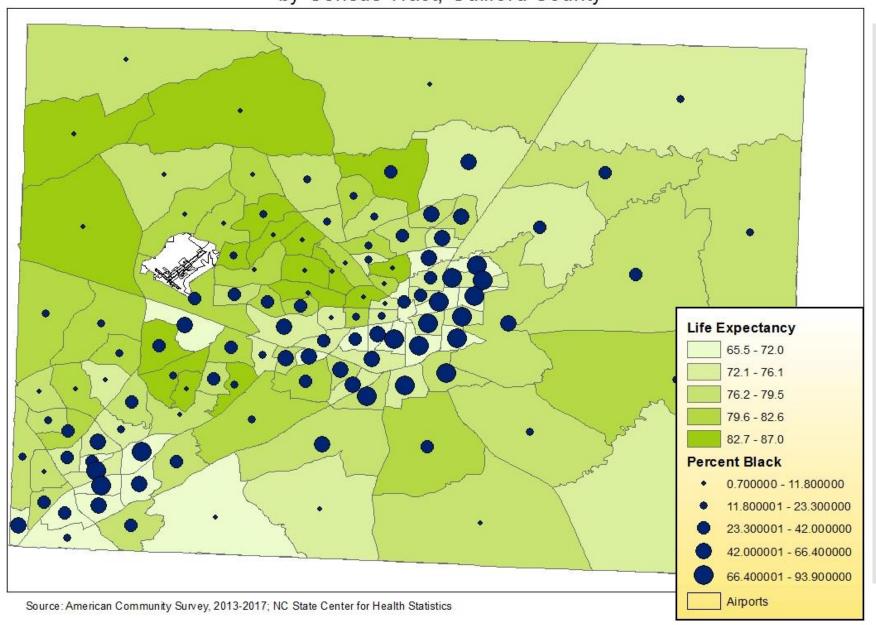
Life Expectancy and Percent White, by Census Tract by Census Tract, Guilford County

Race and Life Expectancy

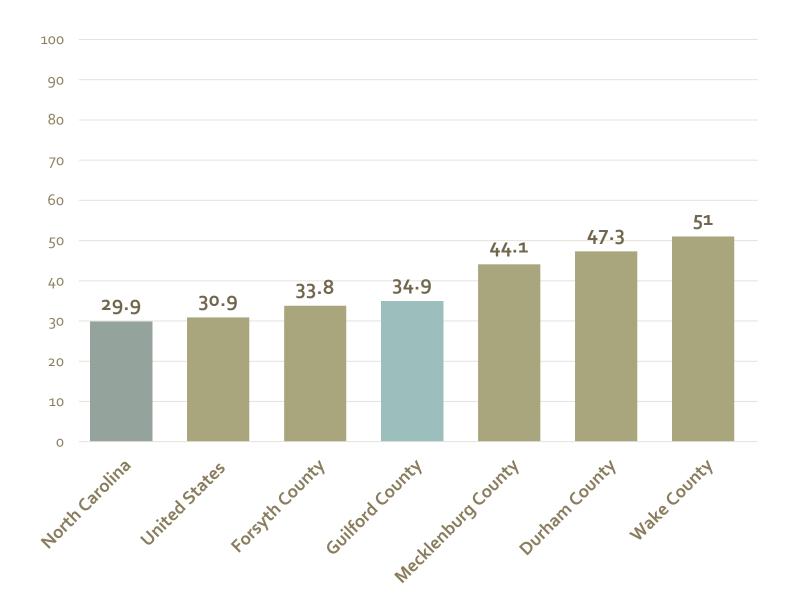


Life Expectancy and Percent Black, by Census Tract by Census Tract, Guilford County

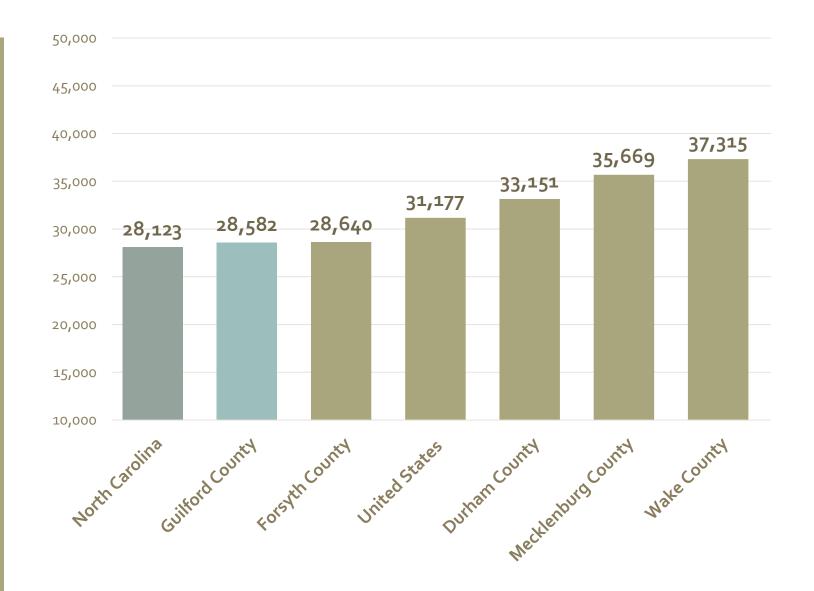
Race and Life Expectancy



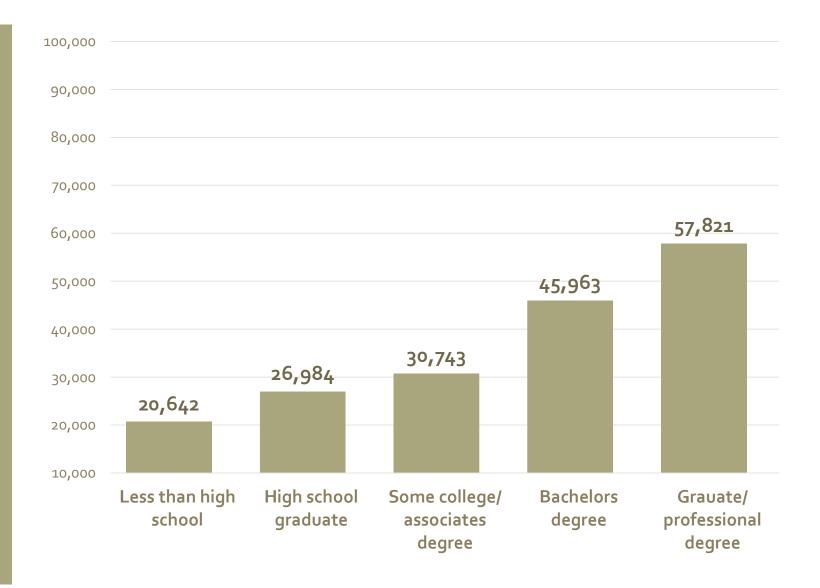
Percent of
Adults
Completing
Bachelor's
Degree or
Higher, County
Comparisons



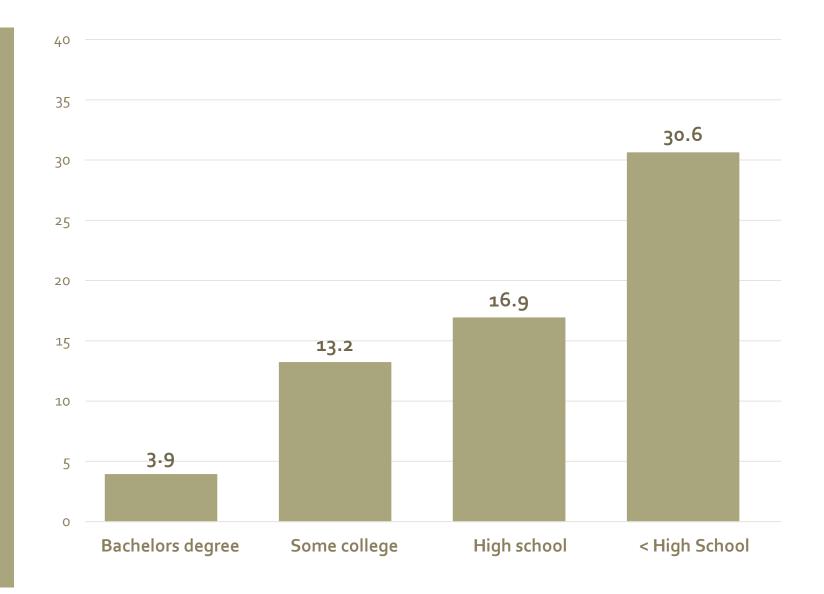
Per Capita
Income (\$),
County
Comparisons



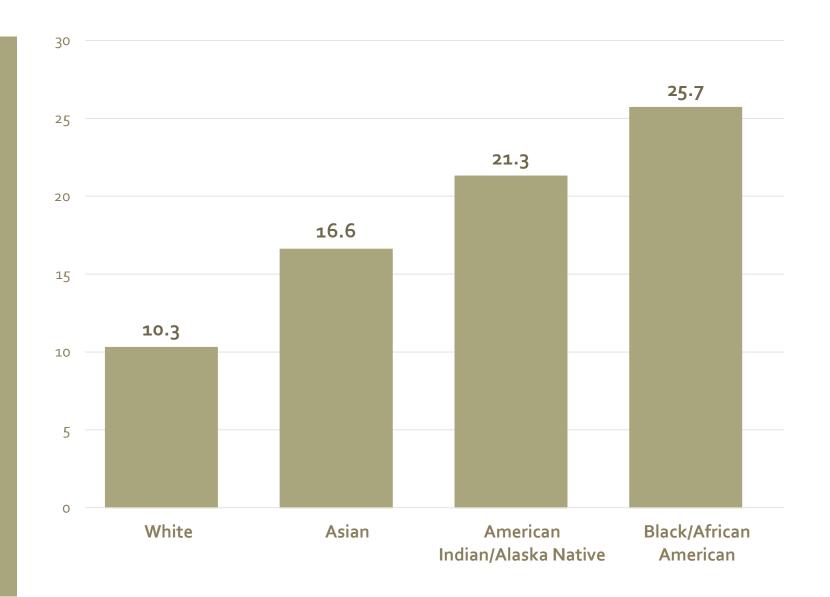
Median
Earnings (\$) by
Educational
Attainment,
Guilford County



Percent of All Persons below Poverty Level, by Educational Attainment, Guilford County



Percent of All Persons below Poverty, by Race, Guilford County, 2013-2017



The Intersection Between Health and Housing

Dr. Stephen J. Sills
Director, Center for Housing and
Community Studies

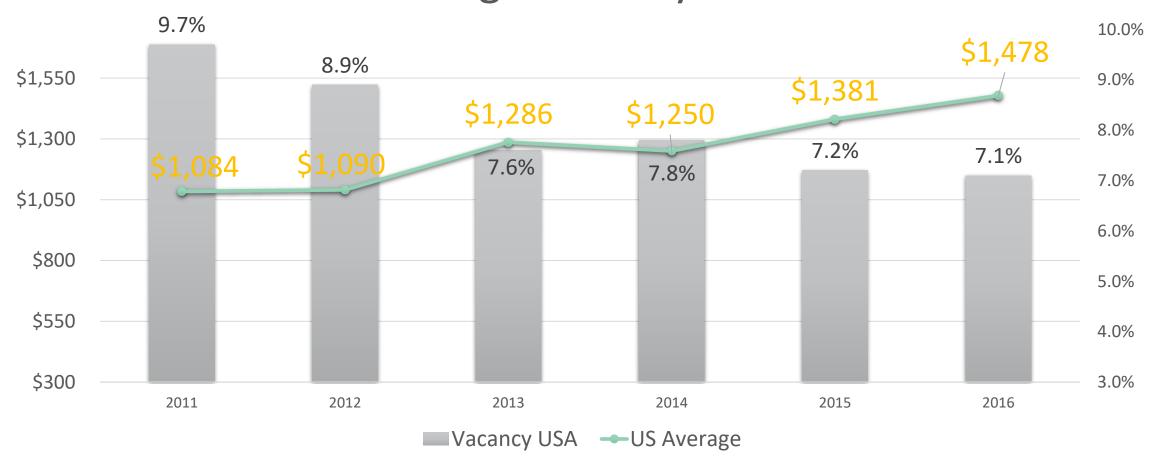
CHA Appendix F2

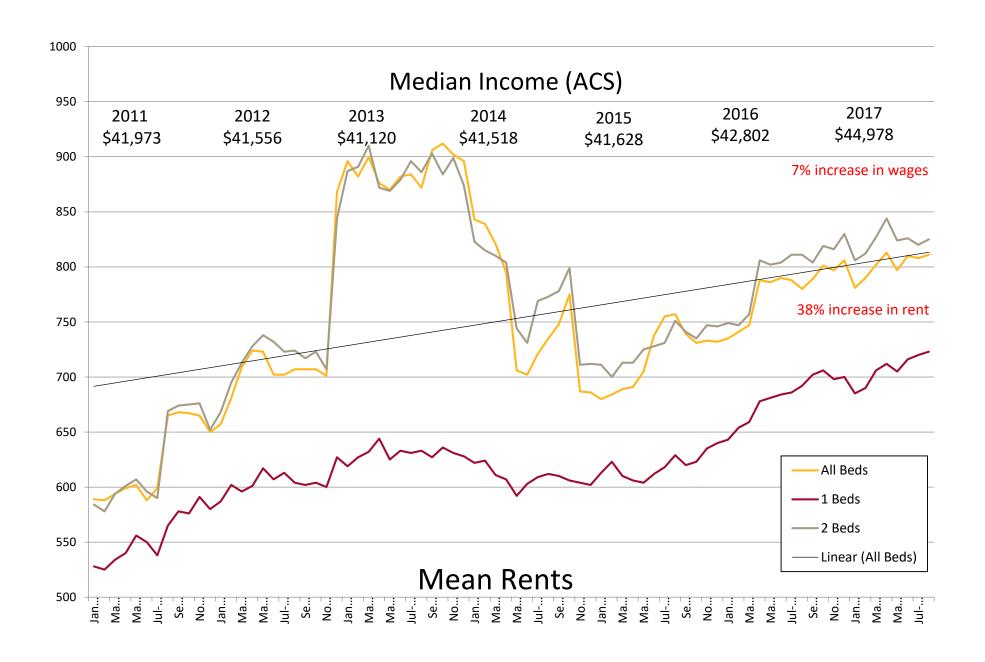


UNCGREENSBORO

Center for Housing & Community Studies

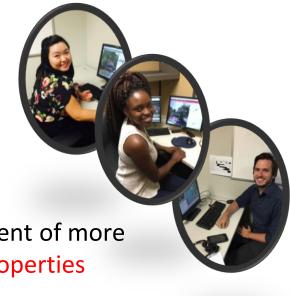
Average Monthly Rent 2011-2016 Average Vacancy Rate

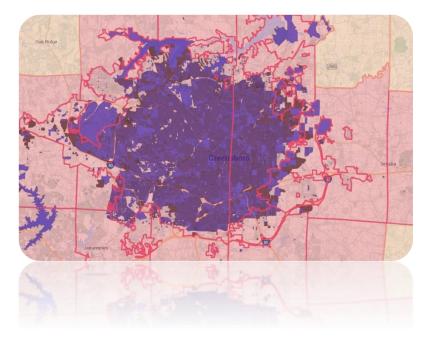




Greensboro Housing Census

Summer-Fall 2016, the UNCG Center for Housing and Community Studies (CHCS) conducted a 'census' of the housing stock, assessing the structural quality of housing in Greensboro.

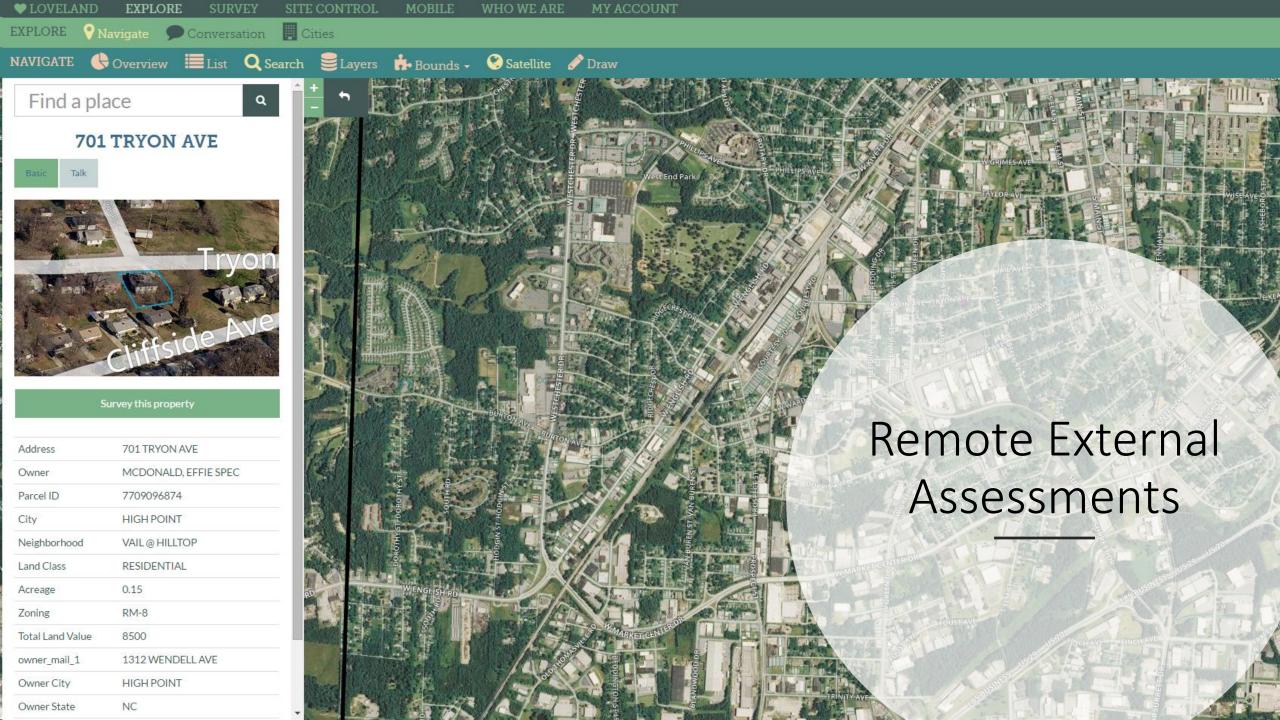


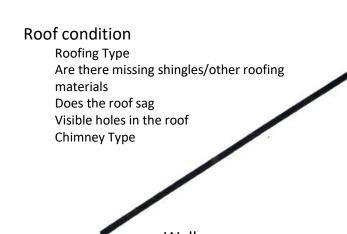


Visual assessment of more than 77,000 properties completed.

parcel-by-parcel assessment of all lots and buildings







Condition of Chimney

Condition of gutters

Are gutters present Gutters appear to leak Gutters appear to have leaves or vegetation Gutters have inadequate drainage

Walls

missing sidings or bricks
Any visible holes or gaps
Outside walls
slope/lean/slant/buckle
Paint Condition

Are the outside walls

Window condition

Are any of the windows broken Visible damage to the casements or frames Do all the windows appear to have screens

Siding Condition Siding Type

Condition of Porch

Is there a porch or stoop
Porch type
Are there visible house
numbers
Is there a porch light for
entry/steps
Condition of stairs
Condition of rails
Handrails
Condition of rails
Handicap Ramp
Condition of ramp

Foundation Condition

Foundation type Visible holes, cracks or damage

Issues with the lawn or property

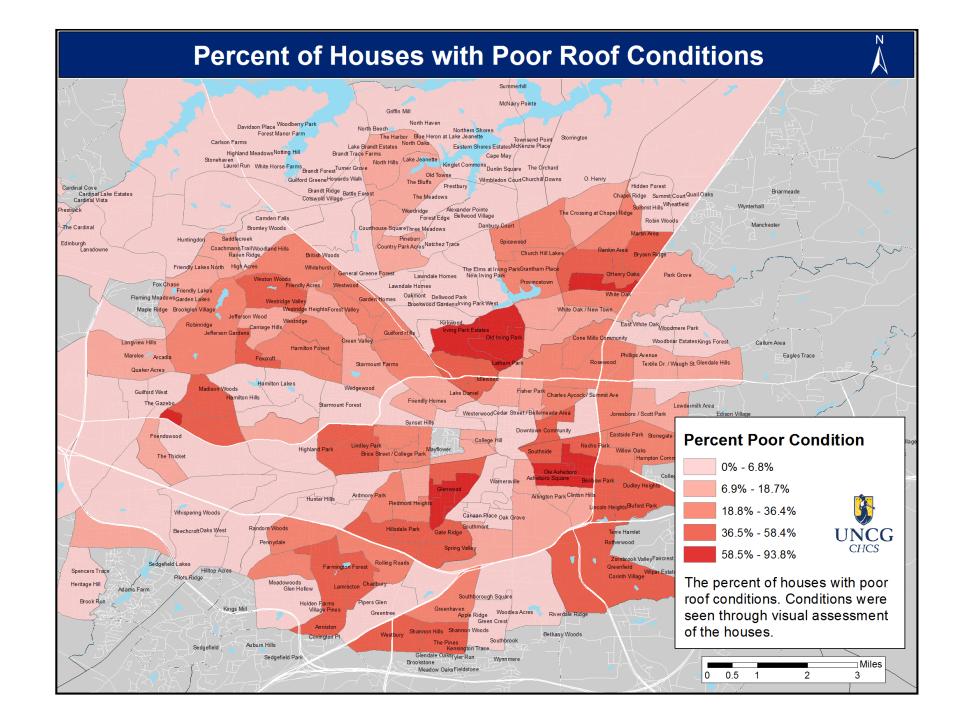
Grass needs mowing
Shrubs need trimming
Trees hanging over roof
Inoperable vehicle(s)
Trash or debris in yard
Building material in yard
Tires, automotive parts
Appliances in yard
Low-hanging power lines
Poor sidewalk condition
Graffiti

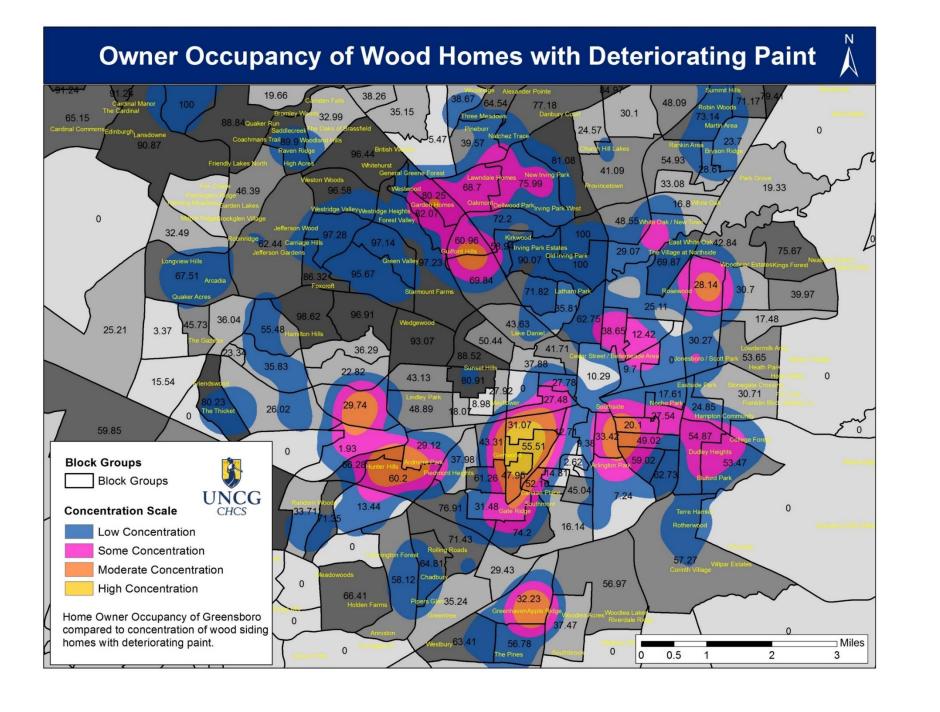




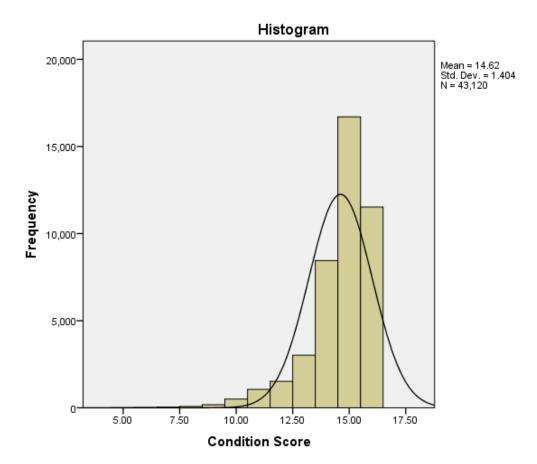








'Below Average' Housing

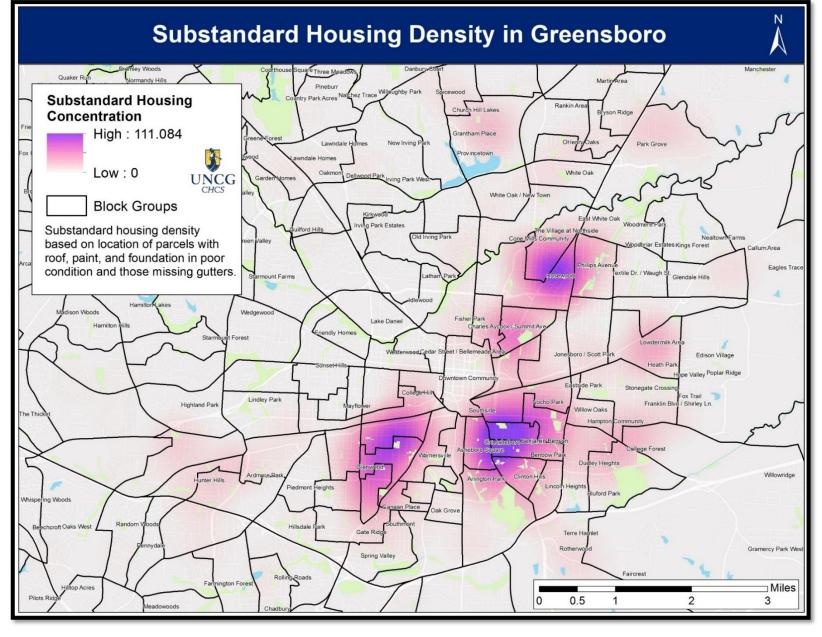


Condition=condition of window + condition of Siding + overall condition of foundation + Condition of Roof + paint condition - Is the structure fire damaged + are gutterspresent.

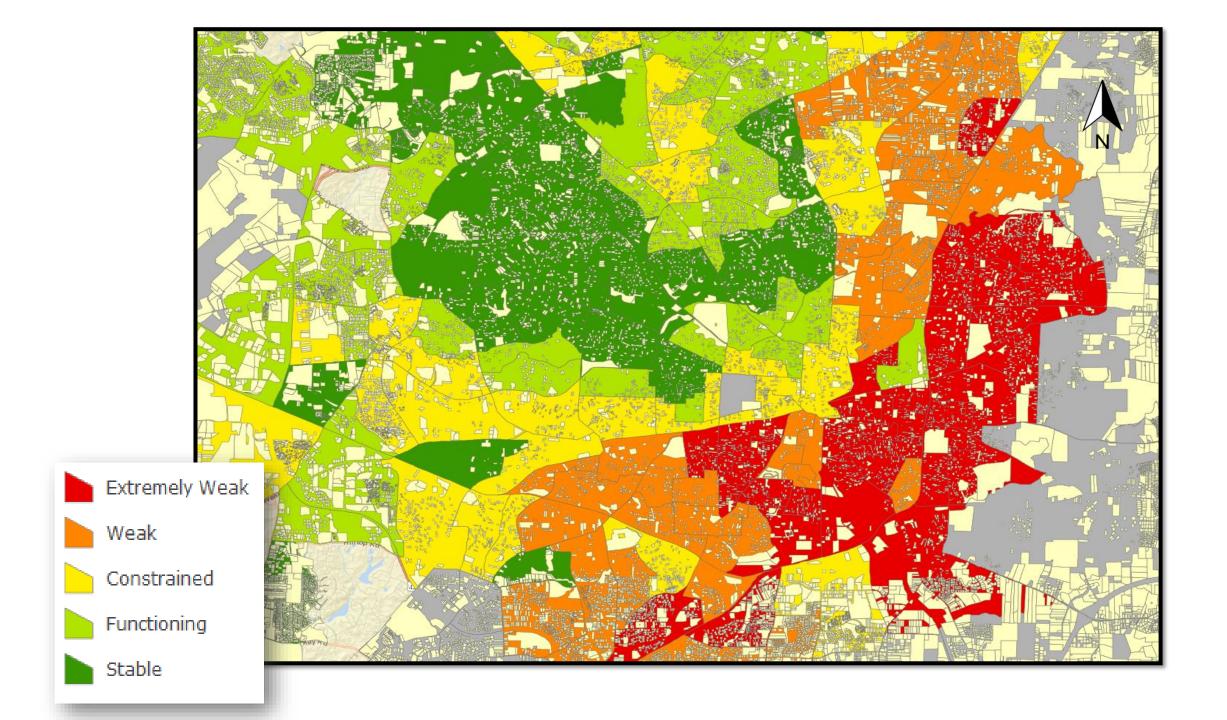
This scale is 18 points with higher being better condition. The 'average' house in Greensboro for which we collected all of this data, is 16.39. The lowest score had poor windows, poor siding, poor foundation, poor roof, poor paint, had no gutters, and may be fire damaged.

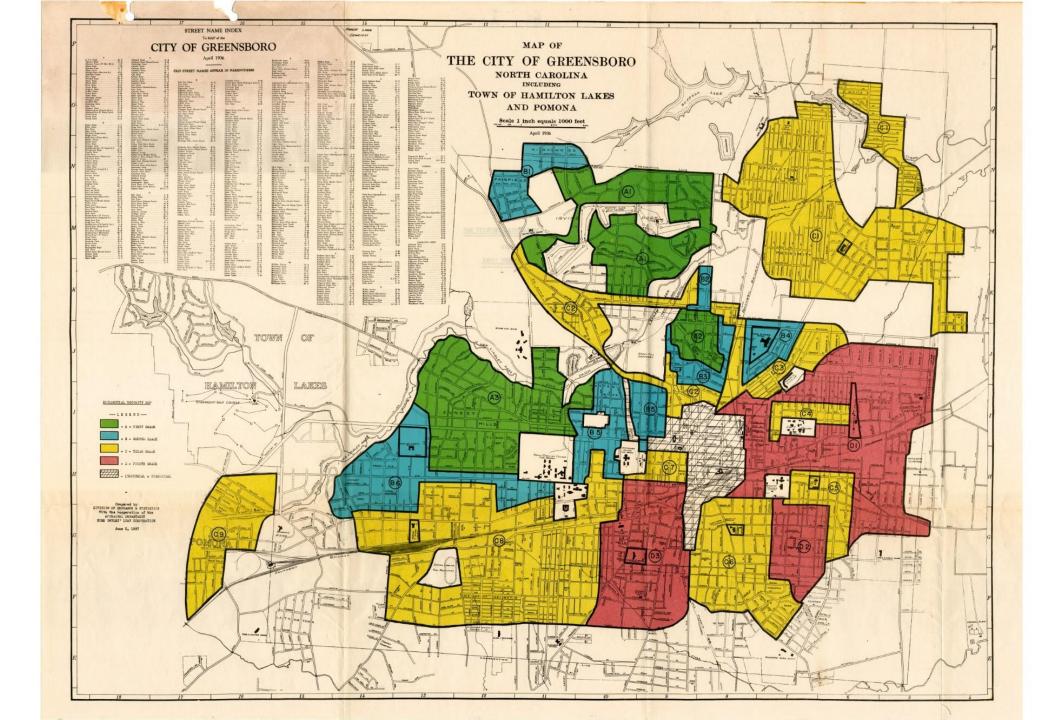
Properties with a score of 14 are a standard deviation below the mean, 13% of properties are a standard deviation below average. Properties with a score of 12 were two and a half standard deviations below the mean, 4.2% of properties were in this category.

Substandard housing density is higher in low income areas of Greensboro and High Point.



From presentation by Dr. Steven Sills, Director of the UNCG Center for Housing and Community Studies.







outcomes and risks.



















Over 6,000 children with asthma to live in places that make them sick in Greensboro.

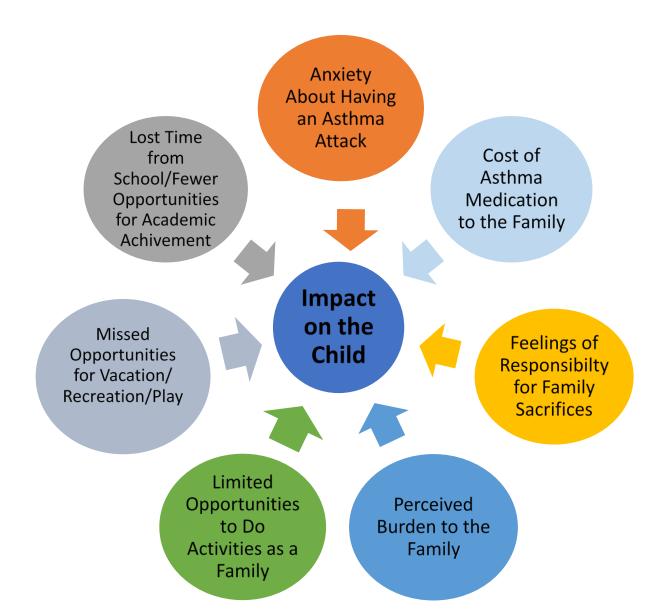
The Asthma and Allergy Foundation of America (2015) shows that Greensboro's asthma rate is influenced by higher than average poverty and uninsured rates.

Disparities in asthma prevalence are evident by race, ethnicity, and geospatial segregation, largely among residents of rental units.

The connection between unhealthy housing and the incidence of pediatric asthma is both a health and quality of living issue.

Housing that makes children sick can often be repaired or improved with modest investments in structural fixes and removal of sources of allergens.

Impact of Childhood Asthma on the Child



- Asthma Prevalence rates are high in Guilford County (15% compared with 8% nationally)
- We looked at primary and secondary diagnoses and ED and hospital visits for just one quarter of 2016 - over 6200 cases in all
- The goal of our project was to see where asthma was concentrated and not the prevalence.

PrimaryDX

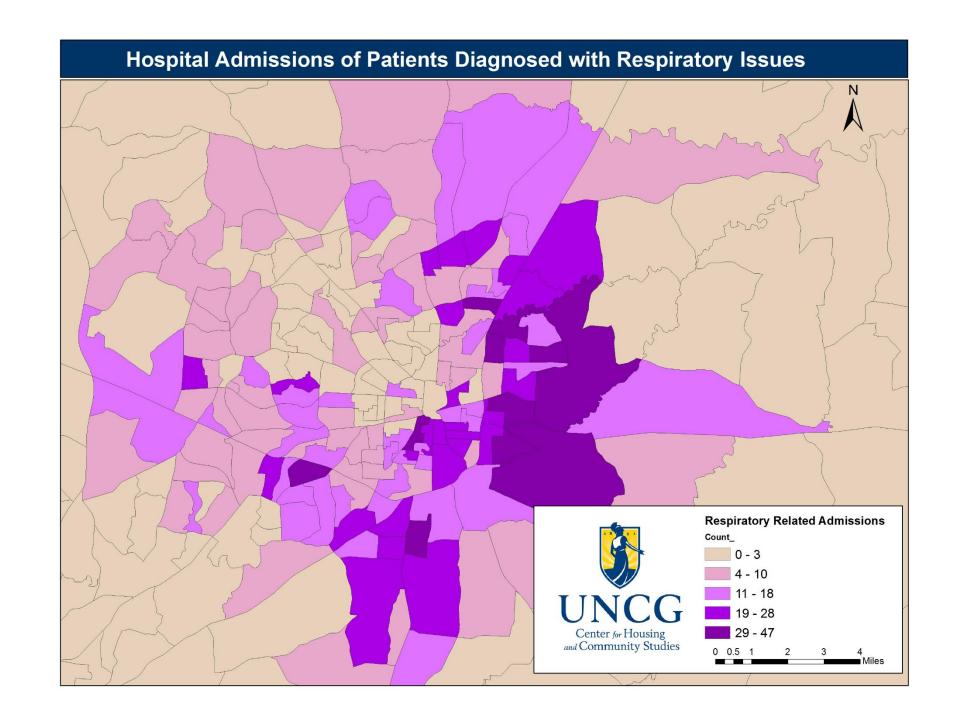
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Asthma	1383	22.3	75.6	75.6
	COPD	20	.3	1.1	76.7
	bronchitis	5	.1	.3	77.0
	pneumonia	77	1.2	4.2	81.2
	upper respiratory infection	281	4.5	15.4	96.6
	respiratory failure with hypoxia/hypercapnia	8	.1	.4	97.0
	Allergy/Allergic rhinitis	34	.5	1.9	98.9
	sinusitis	17	.3	.9	99.8
	Other specified respiratory disorders	4	.1	.2	100.0
	Total	1829	29.5	100.0	
Missing	System	4369	70.5		
Total		6198	100.0		

Asthma 93.2% Other Respiratory Issue 6.8%

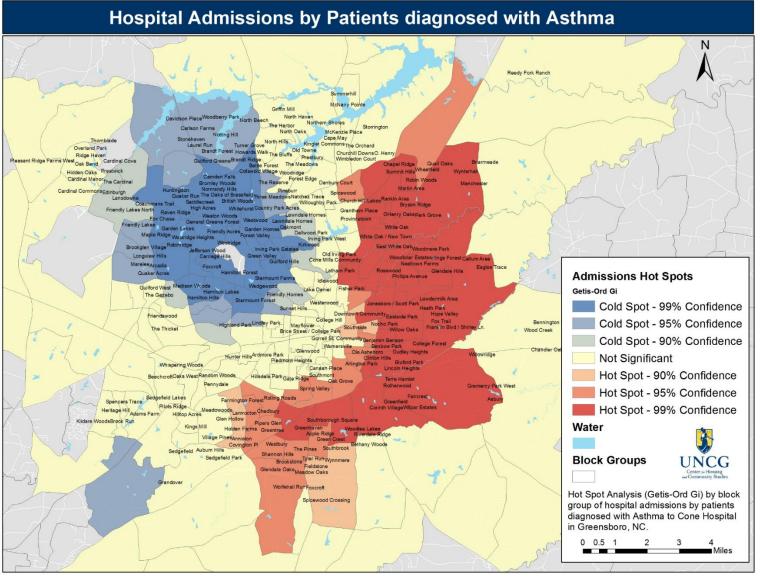
SecondaryDX

Respiratory Illnesses

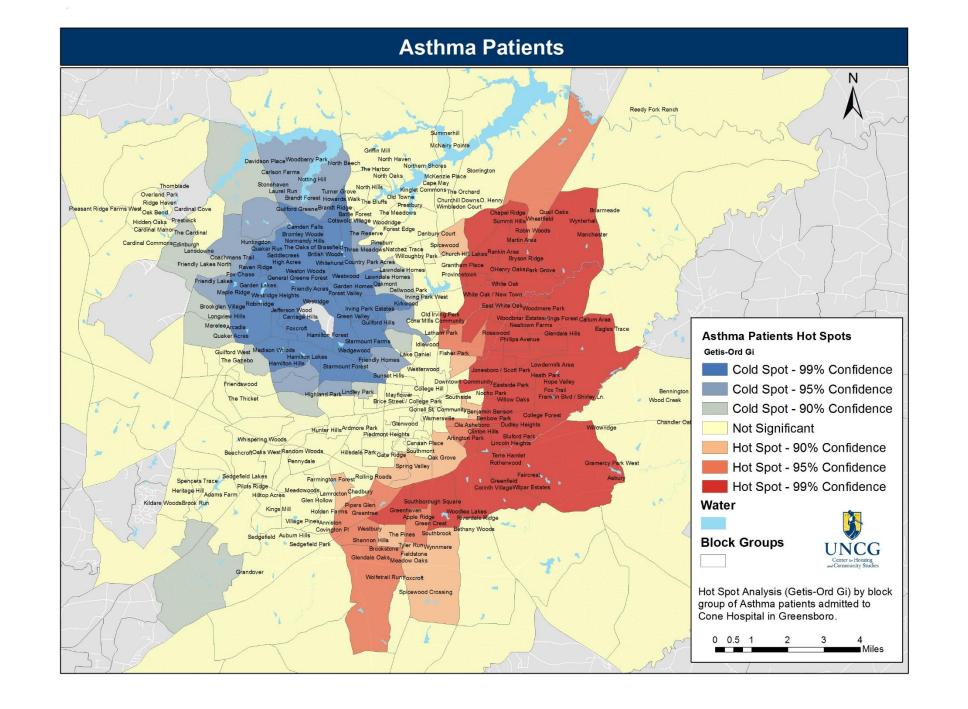
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Asthma	4397	70.9	88.7	88.7
	COPD	408	6.6	8.2	97.0
	bronchitis	1	.0	.0	97.0
	pneumonia	9	.1	.2	97.2
	upper respiratory infection	92	1.5	1.9	99.0
	respiratory failure with hypoxia/hypercapnia	39	.6	.8	99.8
	Allergy/Allergic rhinitis	5	.1	.1	99.9
	Cough	2	.0	.0	100.0
	sinusitis	2	.0	.0	100.0
	Total	4955	79.9	100.0	
Missing	System	1243	20.1		
Total		6198	100.0		

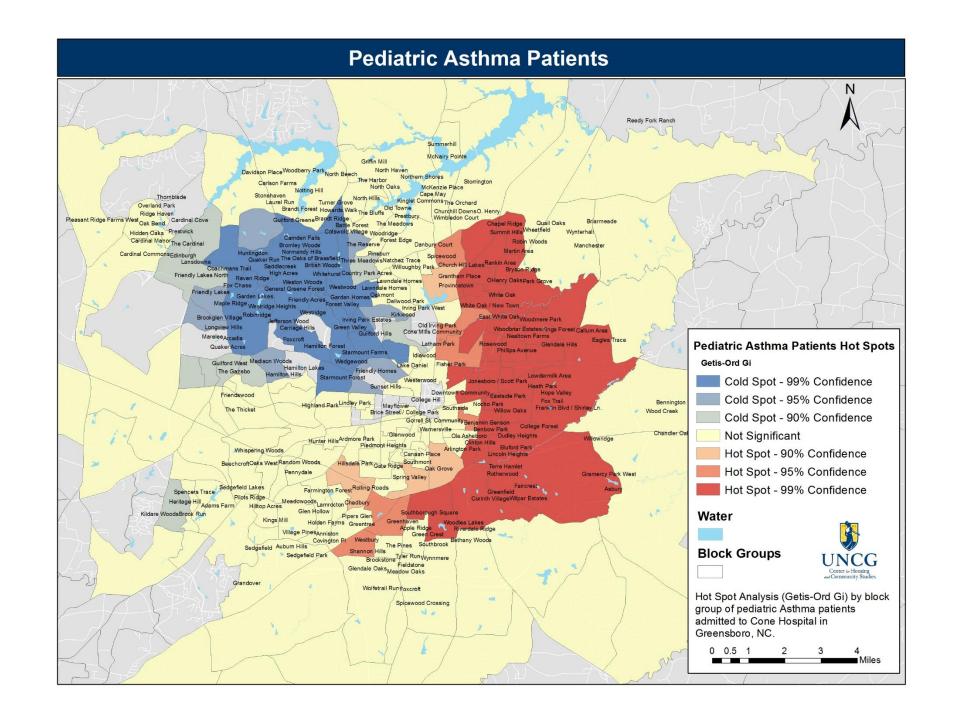


Areas of the County with Substandard housing have higher rates of hospital admissions due to asthma.



From presentation by Dr. Steven Sills, Director of the UNCG Center for Housing and Community Studies.





						Corre	lations							
		Mean Tax Value	Home Owner Occ	Med Income	School Prof	Perc No Gutter	Perc Bad Paint	Perc Vacant	Renter Occ	Non white	Fam Poverty	Fire	Foreclose	LOE
All Admissions	Pearson Correlation	233**	441**	519**	468**	.376**	.200*	.176*	.441**	.727**	.585**	.409**	.305**	.489*
	Sig. (2-tailed)	.003	.000	.000	.000	.000	.010	.024	.000	.000	.000	.000	.000	.000
	N	164	162	162	164	164	164	164	162	164	164	164	164	164
II Pediatric	Pearson Correlation	207**	347**	467**	471**	.323**	.117	.195*	.347**	.670**	.556**	.325**	.259**	.450 [*]
	Sig. (2-tailed)	.008	.000	.000	.000	.000	.136	.012	.000	.000	.000	.000	.001	.000
	N	164	162	162	164	164	164	164	162	164	164	164	164	164
All Respiratory	Pearson Correlation	240**	405**	493**	450 ^{**}	.334**	.187*	.153	.405**	.714**	.560**	.346**	.279**	.456 [*]
	Sig. (2-tailed)	.002	.000	.000	.000	.000	.017	.051	.000	.000	.000	.000	.000	.000
	N	164	162	162	164	164	164	164	162	164	164	164	164	164
II Unduplicated	Pearson Correlation	223**	430**	499 ^{**}	474**	.352**	.162*	.159*	.430**	.718**	.555**	.429**	.295**	.501*
	Sig. (2-tailed)	.004	.000	.000	.000	.000	.039	.041	.000	.000	.000	.000	.000	.000
	N	164	162	162	164	164	164	164	162	164	164	164	164	164
ediatric lespiratory	Pearson Correlation	180 [*]	349**	461**	408**	.313**	.154*	.228**	.349**	.636**	.562**	.256**	.240**	.394*
	Sig. (2-tailed)	.021	.000	.000	.000	.000	.049	.003	.000	.000	.000	.001	.002	.000
	N	164	162	162	164	164	164	164	162	164	164	164	164	164
ediatric Induplicated	Pearson Correlation	189 [*]	343**	456 ^{**}	501**	.293**	.097	.161*	.343**	.675**	.548**	.347**	.242**	.457 [*]
	Sig. (2-tailed)	.016	.000	.000	.000	.000	.217	.039	.000	.000	.000	.000	.002	.000
	N	164	162	162	164	164	164	164	162	164	164	164	164	164

^{**.} Correlation is significant at the 0.01 level (2-tailed).

^{*.} Correlation is significant at the 0.05 level (2-tailed).

		Social	Housing	Neighborhood	Full Model
		Determinants	Conditions	Characteristics	
		Model 1	Model 2	Model 3	Model 4
	Constant	-	***	-	-
nants	Non-White	***		***	***
etermir	Moved Last Year	-		-	-
Neighborhood Social Determinants	Completed HS	***		***	***
	% Families in Poverty	**		**	**
	% Homes Owner Occupied			+	-
Neigh	Mean Tax Value			-	-
ons	% Vacant Homes		-	-	-
Conditi	% Homes with Bad Roof		-		-
Housing Conditions	% Homes with No Gutter		***		*
I	% Homes with Bad		-		+
	Paint				
	% Homes with Bad Found		-		-
	R ²	.614	.154	.622	.638
	'	.014 df 4	df 5	.022 df 7	.038 df 11
		F=.0001	F=.0001	F=.0001	F=.0001

Evictions



Greensboro has the highest evictions rate of cities in North Carolina

HERE IS A SHORT LIST...



16,600 Filings

In 2016, landlords filed over 16.600 summary ejectments to evict tenants for nonpayment.



9,600 Annually

9,600 were summary ejectments granted in whole or in part



26 Evictions a Day

26 households face being evicted on any given day in Guilford County



Health & Mental Health

Eviction, or even the threat of eviction, has been shown to affect mental and physical health.



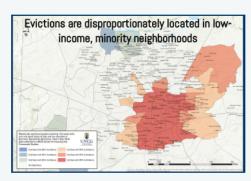
Impact on Children

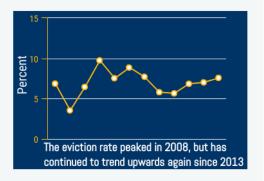
School performance tends to decrease when students are in unstable housing situations.



Eviction Rate

7.6% The Eviction Lab shows the eviction rate in Guilford County at 7.57 per 100 renter households.

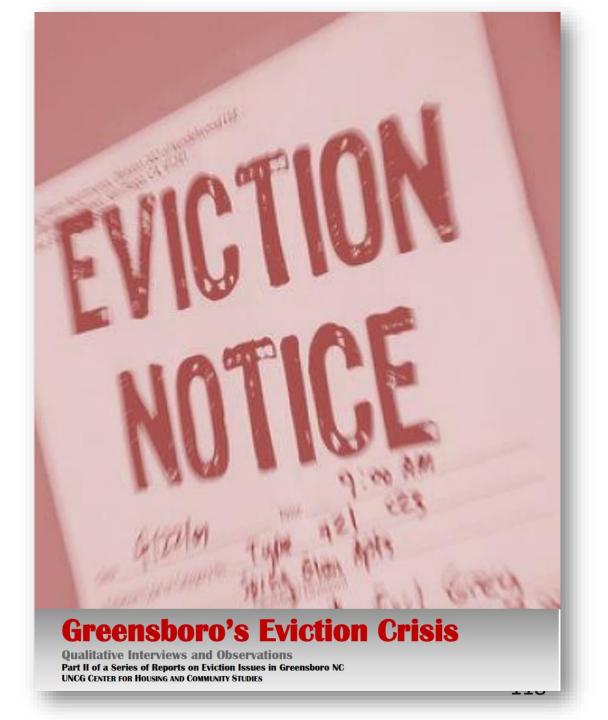


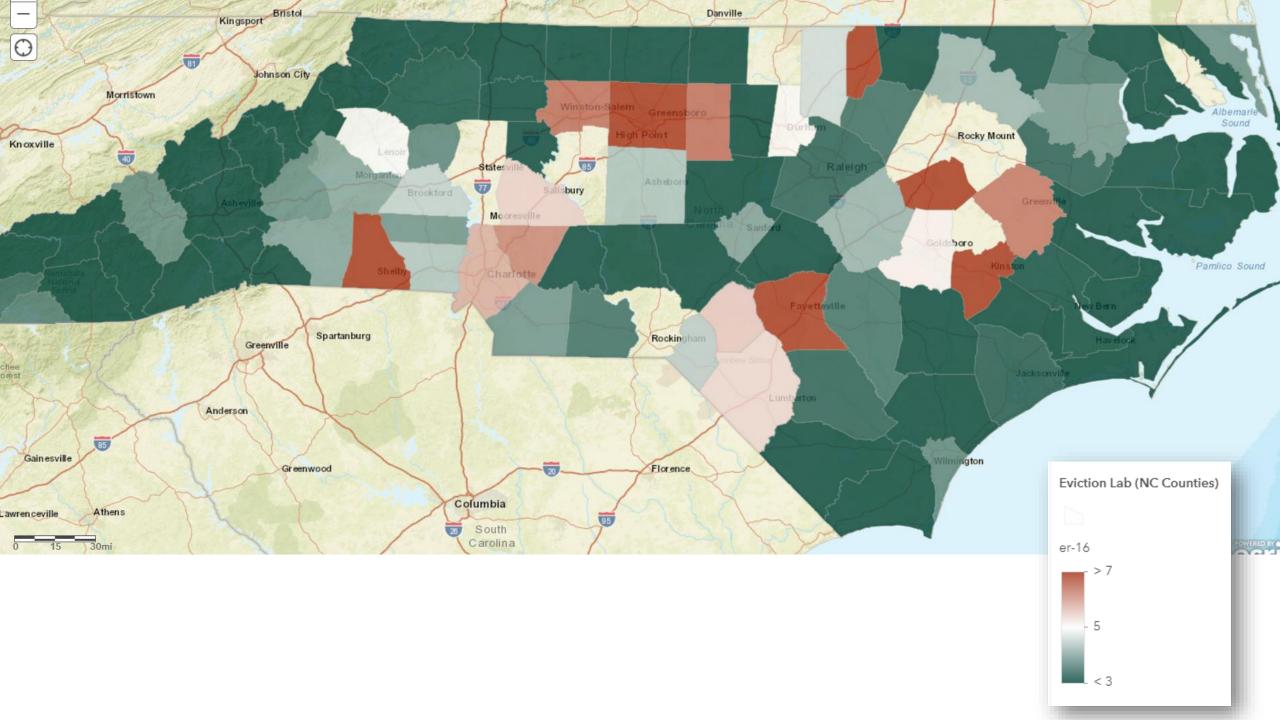


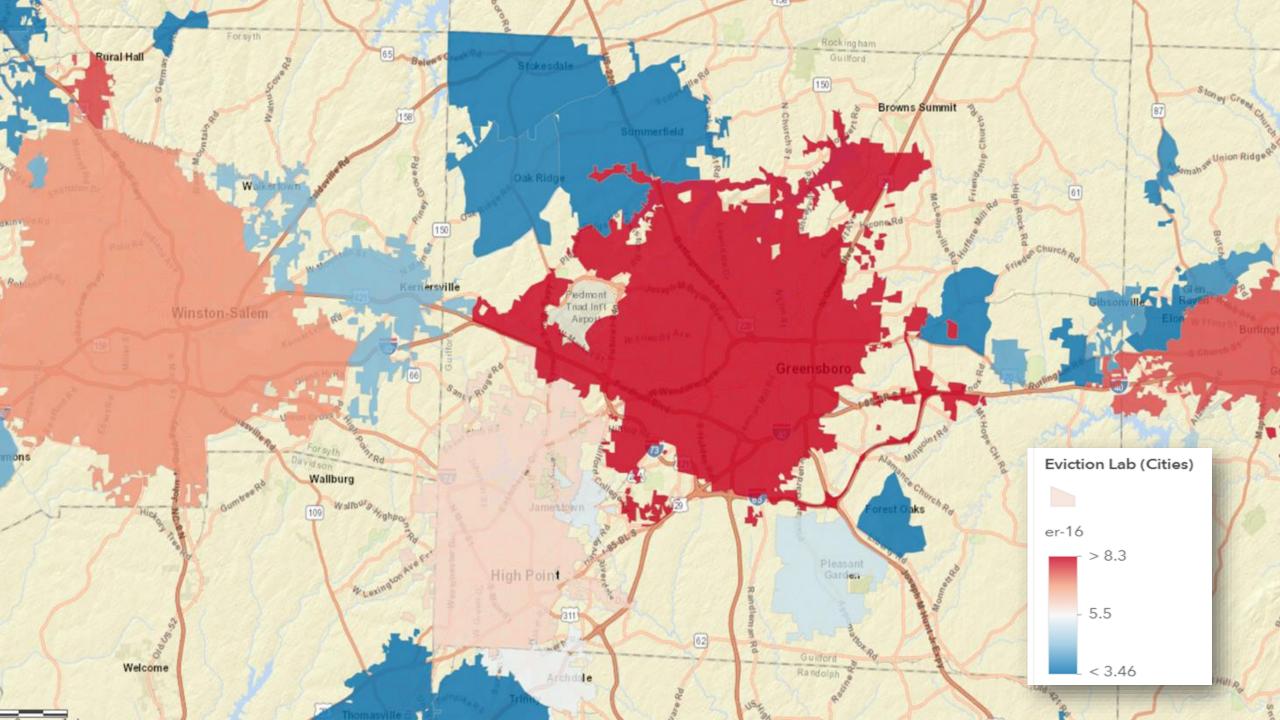
More than half of people interviewed experienced periods of homelessness resulting from their evictions



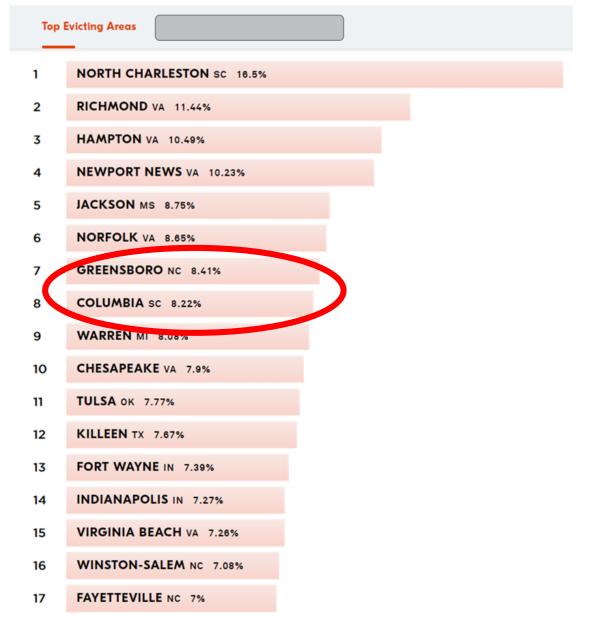
66 I lived in a tent in the woods with my dogs for about two months before a woman gave me some money to get a hotel for a while. When the money ran out, I was back and forth in between the woods and living in a hotel whenever I had the money. 99



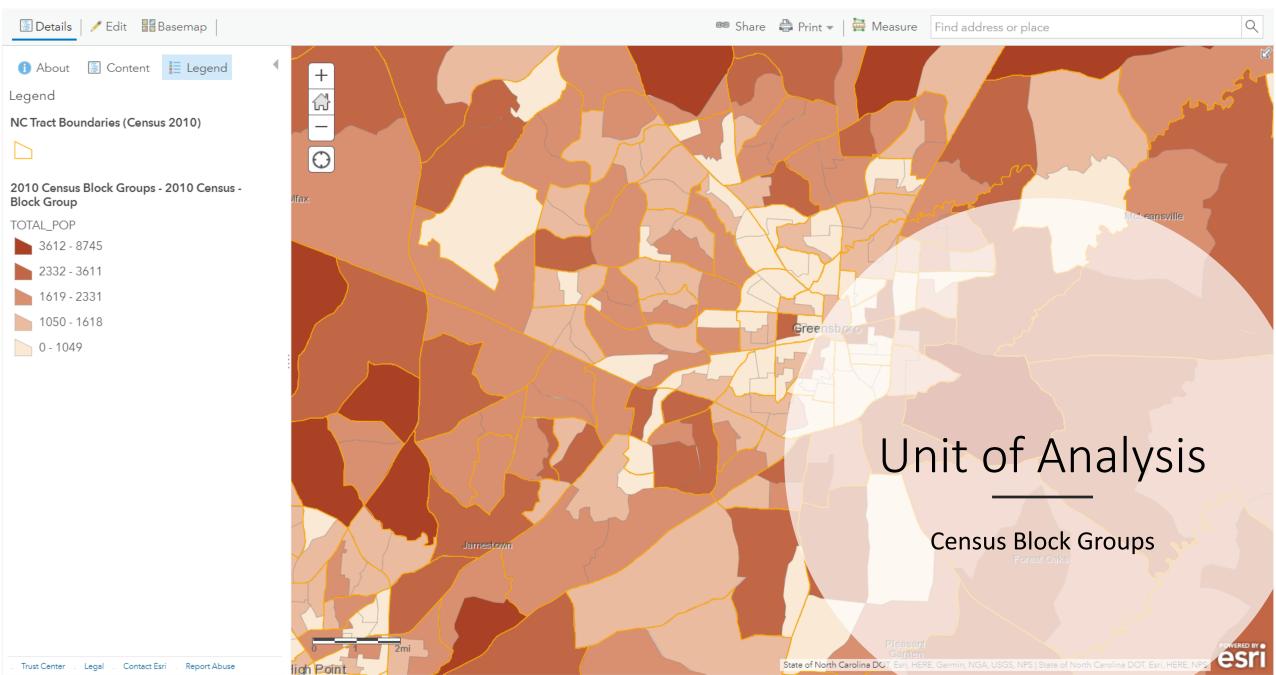


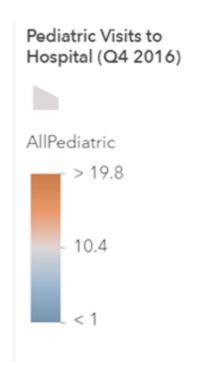


Greensboro ranks 7th in the nation in eviction. There were 4,948 evictions in Greensboro in 2016, an average of 13.56 households evicted every day.

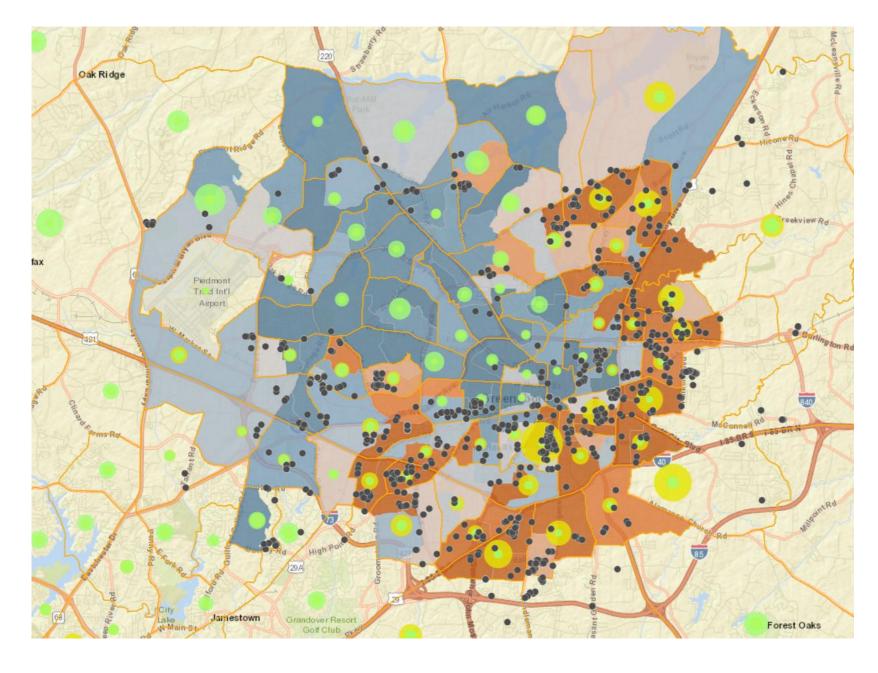


Source: Eviction Lab; from presentation by Dr. Stephen Sills, Director, UNC Center for Housing and Community Studies.









Greensboro_NC - Educational Opportunity Index Categories - copy

Very Low

Lov

Moderate

High

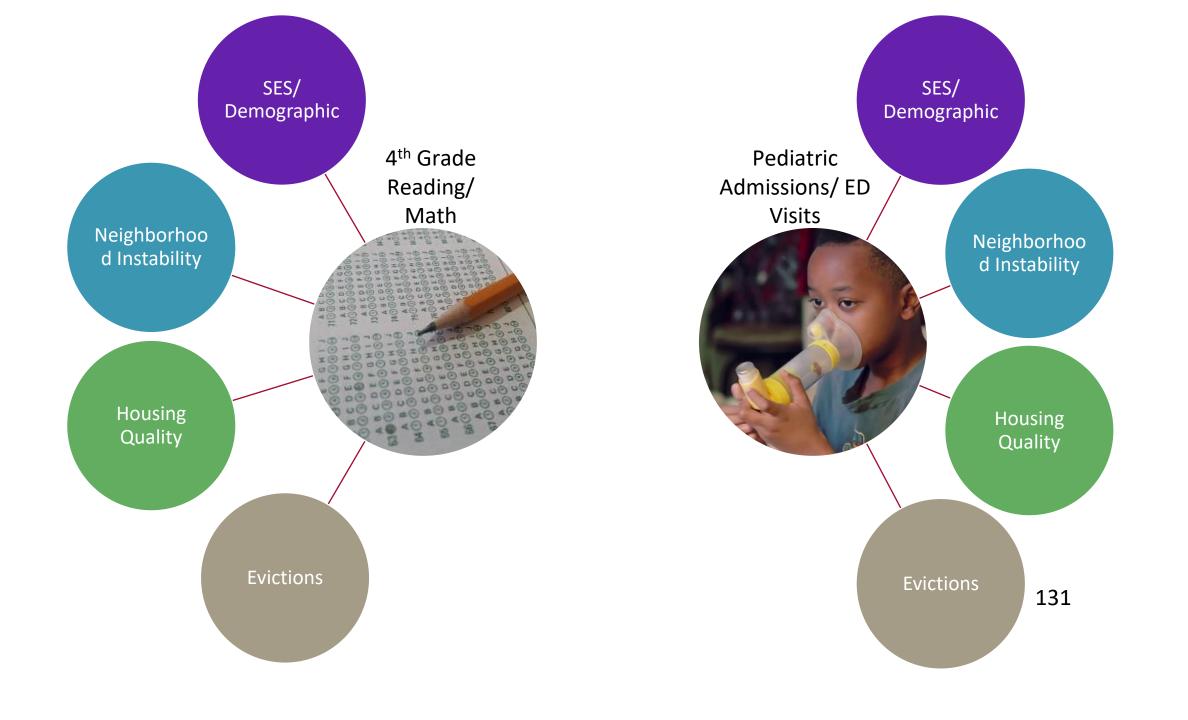
Very High



Center *for* Housing & Community Studies



		Pediatric Admissions/ Visits to ED 2016.	Fourth grade reading proficiency rate calculated as the average for the three nearest in-district schools				
All Pediatric Visits Cone ED Q4 2016	Pearson Correlation	1	518**				
	Sig. (2-tailed)		.000				
	N	164	164				
Reading proficiency rate.	Pearson Correlation	518*	1				
	Sig. (2-tailed)	.000					
	N	164	164				
Nonwhite	Pearson Correlation	.670	579				
	Sig. (2-tailed)	.000	.000				
	N	164	164				
Foreign Born	Pearson Correlation	.060	211				
	Sig. (2-tailed)	.448	.005				
	N	164	164				
poverty rate	Pearson Correlation	.556*	390**				
	Sig. (2-tailed)	.000	.000				
	N	164	164				
rent burden	Pearson Correlation	.106	162*				
	Sig. (2-tailed)	197	.047				
	N	150	450				
eviction rate (Eviction Lab)	Pearson Correlation	.495**	425**				
	Sig. (2-tailed)	.000	.000				
	N	161	164				
Summary Ejectment Filings May 2016	Pearson Correlation	.381**	174				
	Sig. (2-tailed)	.000	.026				
	N	164	164				
Perc Bad Roof CHCS Observations	Pearson Correlation	.134	084				
	Sig. (2-tailed)	.088	.286				
	N	161	104				
Perc No Gutter CHCS Observations	Pearson Correlation	.323**	271**				
	Sig. (2-tailed)	.000	.000				
	N	164	164				
Perc Bad Paint CHCS Observations	Pearson Correlation	.117	019				
	Sig. (2-tailed)	.136	.813				
	N	164	164				
Perc Bad Found CHCS Observations	Pearson Correlation	.109	080				
	Sig. (2-tailed)	.164	.308				
	N	164	164				
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							



School Outcomes	Health Outcomes
(4 th Grade reading	(pediatric respiratory
	visits/admissions)
Model 1	Model 2
***	***
***	***
***	-
***	***
-	_
-	_
**	_
-	***
_	_
***	***
***	-
.482	.535
	df 10 F<.0001
	(4 th Grade reading proficiency) Model 1 *** *** - *** - *** ***

Safe, Affordable Housing



Source: Social Determinants of Health (SDOH) https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health